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THE AMERICAN ELEVATOR AND GRAIN TRADE.

Entered as second-class matter June 26, 1885, at the Post Office at Chicago, Illinois, under Act of March 3rd, 1879.

A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

PUBLISHED BY
MITCHELL BROS. COMPANY
(INCORPORATED.) VOL XXVII.

CHICAGO, ILLINOIS, APRIL 15, 1909.

No. 10. { ONE DOLLAR PER ANNUM,
SINGLE COPY, TEN CENTS.

WE MANUFACTURE MACHINERY

... for ...

Elevating and Conveying Grain, including all
of the Standard Appliances for this purpose.

We do not manufacture shellers, clippers, cleaners or special machines
for treating grain, but confine our efforts strictly to machinery for
HANDLING GRAIN.

Let us figure with you.

STEPHENS-ADAMSON MFG. Co.

Manufacturers of Conveying and
Transmission Machinery

MAIN OFFICE AND WORKS, AURORA, ILL.

NEW YORK OFFICE—43 Exchange Place

CHICAGO OFFICE—First National Bank Bldg.



Grain Elevator Belting

of special construction

**Best Made
and Cheapest**

Get our prices

The Gutta Percha
and
Rubber Mfg. Co.

224-226 Randolph Street

CHICAGO

We manufacture everything for the grain elevator, including:

Salem Buckets
Spiral Conveyor
Power Shovels
Car Pullers
Friction Clutches

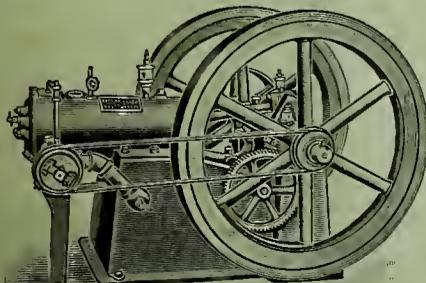
Sprocket Wheels
Link Belting
Shaft Bearings
Wagon Dumps
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Flexible Spouts
Elevator Boots
Belt Conveyors
Rope Drives
Car Movers, Etc.

General Catalog No. 7 for the asking.

SKILLIN & RICHARDS MFG. CO., CHICAGO, ILL.

Reliable and Cheap



Power is what you get when
you use a

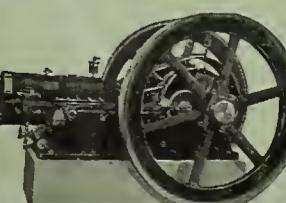
**Hagan Gas
or Gasoline Engine**

Sold under a positive guarantee
to give perfect satisfaction.
Sizes 2-h. p. to 100-h. p. No
packing; no delicate parts.

Send for Catalogue "C."

HAGAN GAS ENGINE & MFG. CO., (Incorporated) Winchester, Ky.

FOOS



GAS ENGINES ARE DURABLE

WEIGHT AND LARGE BEARING SURFACES
are put into the wearing parts—large
crank-shafts, long phosphor bronze main
bearings and all bearings easily adjustable.

IGNITER POSITIVELY DRIVEN—

wipe spark. No snap, no hammer, no
coil springs about the igniter.

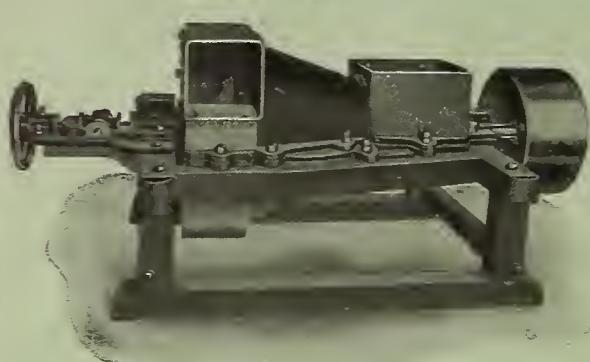
VALVES ARE VERTICAL—

No side wear and never out of adjustment.
Every bearing oiled while engine is in operation.
The FOOS has many exclusive features of
superiority.

Catalogue No. 39 tells the rest of the story.

THE FOOS GAS ENGINE CO., Springfield, Ohio.

**The Ohio Fan Discharge
Corn Sheller**

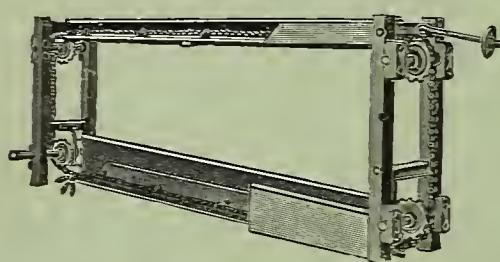


Patents Pending. Adjustable Cylinder

WRITE FOR CIRCULAR OF OUR
**OHIO GYRATING
GRAIN CLEANER**

EQUAL TO ANY CLEANER MADE

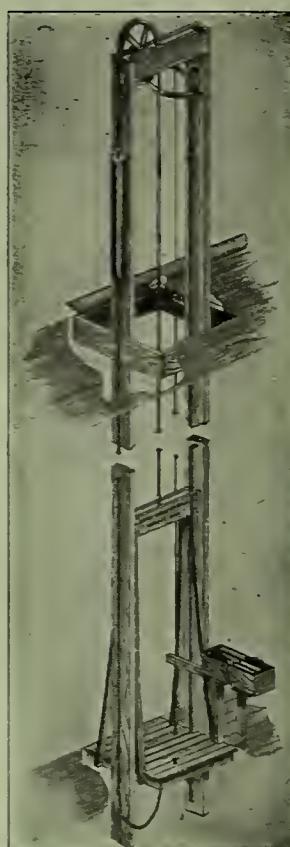
Chain Drag Feeders



Made Complete, Any Length, "Cast Iron" Bottom

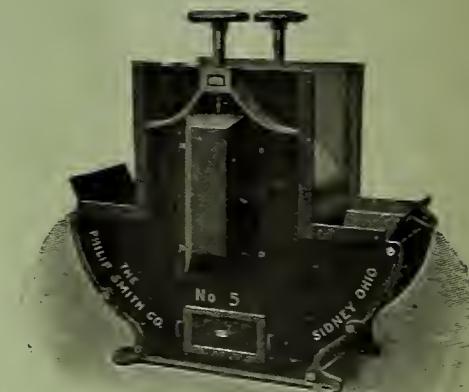
Easy
to
Install

Requires
Little
Space



**Cast Iron Elevator
Boots**

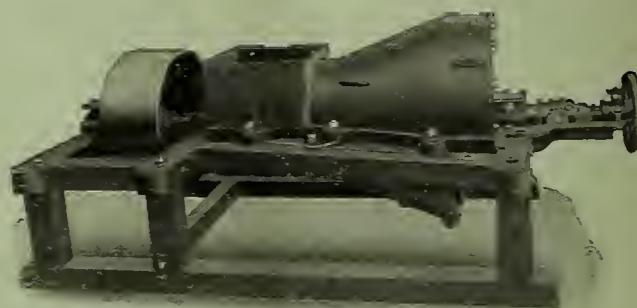
Safety
Man
Lifts
With
Automatic
Locking
Device



With or Without Tightener

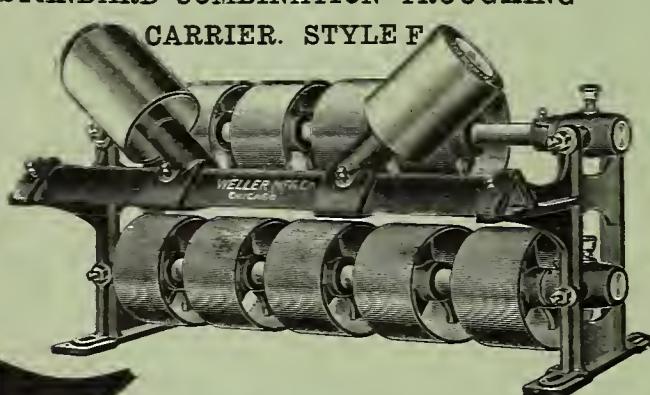
When building or repairing
get our prices on any machin-
ery or supplies.

Ohio Regular Corn Sheller



Both Style Shellers, 300 to 1,500 bu. per hour

STANDARD COMBINATION TROUGHING
CARRIER. STYLE F



Weller-Made Combination Troughing Carriers are designed particularly for grain conveyors. This type has been adopted by leading engineers and builders of terminal elevators.

Oscillating bearings, either plain, fitted with grease cups, self oiling, ring oiling or roller are furnished for the horizontal roll shafts. The troughing rolls run on hollow perforated steel shafts filled with grease, fed by means of compression cups, and are horizontally adjustable on the angle iron cross bar. Ask about prices.

**Telescope Flexible Car Loading
Spouts**



The one shown is made on the popular telescope system. Illustrations show it opened and closed. In addition to the regular sizes we furnish these spouts in any length, diameter or gauge of steel. Catalog gives prices.

THE

Philip Smith Mfg. Co.

ELEVATOR MACHINERY
AND
POWER TRANSMISSIONS

SIDNEY

OHIO.

These are **WELLER-Made**

Consequently they are made a little better than seems necessary. Moreover, they are sold at prices a little lower than ordinarily. This movement is made possible by a large output and exceptional manufacturing facilities.

WELLER-MADE MACHINERY is money-saving machinery. For handling materials in Elevators and Flour Mills it excels — from the standpoints of economy in time, labor and space.

These statements have been PROVEN CORRECT by discriminating concerns throughout the country. Our 512 book explains our entire line in detail. We send it free if you ask.

Power Shovel

A Weller-Made Power Shovel is better than others in this way: It occupies less space than others do. The winding drum is centrally located in the supporting frame—which obviates the necessity of right and left hand shovels. The clutch drives with the full area of the surface of the jaws—which reduces wear. In place of a chain, which is used with other shovels to operate the clutch, a worm gear actuates the stop lever; this is much more accurate.

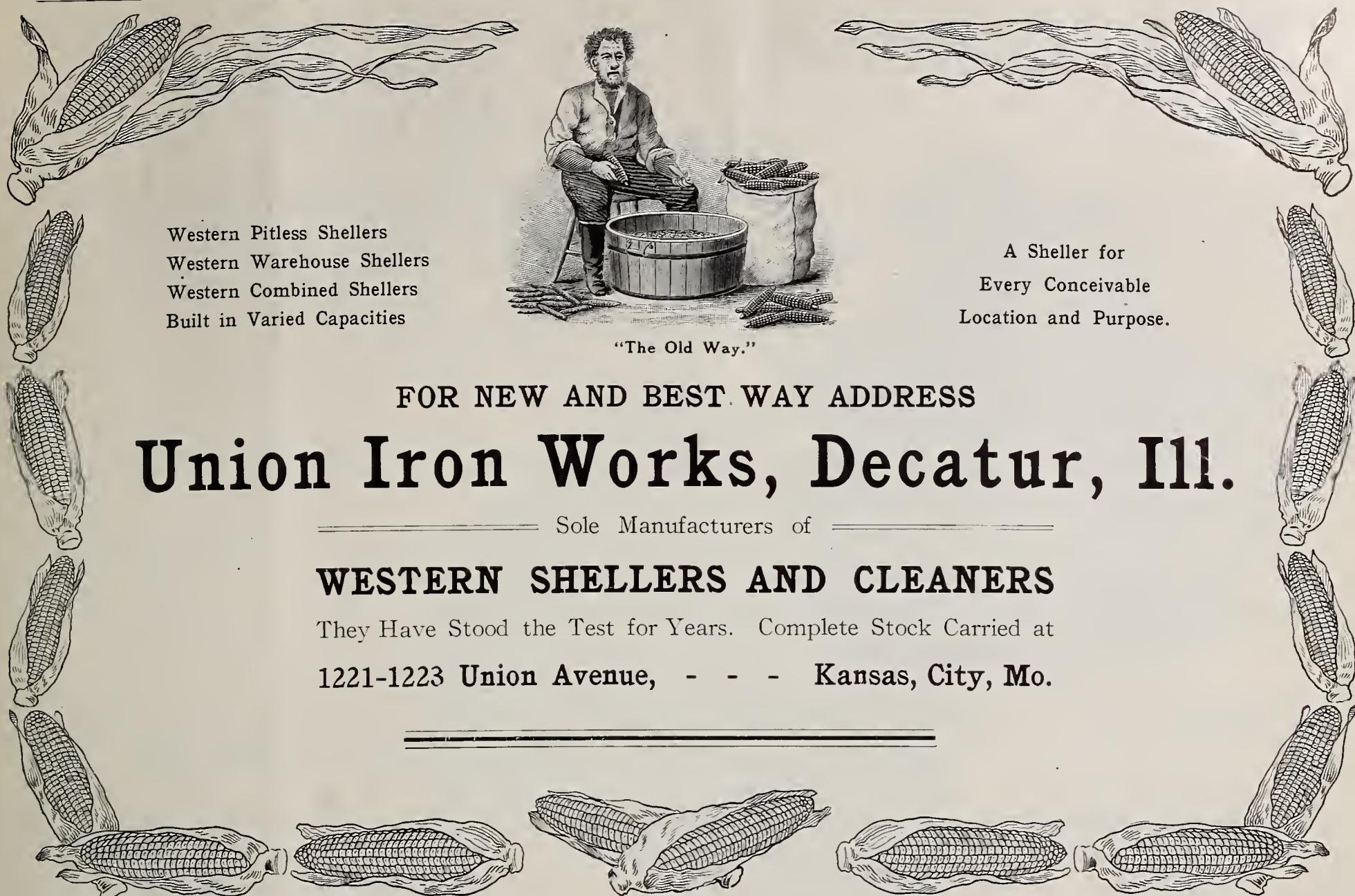
Weller-Made Shovels are strongly made from best materials and are guaranteed to be satisfactory.



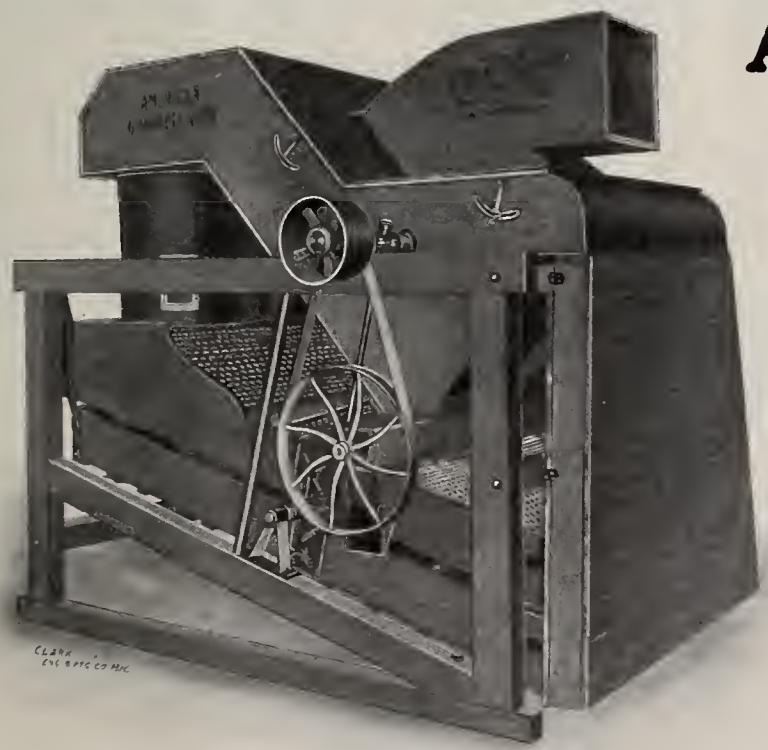
WELLER IMPROVED POWER SHOVEL

Weller Mfg. Co.

116-126 E. North Avenue, Chicago



The Points of Superiority of the American Grain Cleaners



may be summed up in the following patented and exclusive features:

The Double Pneumatic Cleaning Cylinders in which about 90 per cent of the impurities are taken out before the grain reaches the sieves.

The Double Compensating Shakers which are operated from the fan shaft by a single pair of solid bronze eccentrics with steel connecting rods and oscillating cross arms, and the result of which is a reciprocating motion so perfectly counterbalanced that positively no bracing of the machine is required.

The Combination Fan and Shaker Shaft which necessitates the use of only two main bearings and two eccentrics to operate both the fan and the two shakers. This effects a tremendous saving in friction, power, lubrication, wear and tear.

The Screen Arrangement which consists of a Scalping Screen, a Double Set of Main Screens, and a Double Set of Seed Screens, and of which each of the two shakers is provided with a full Main Screen and an equally large Seed Screen.

As a result of the combination of the above mentioned special features, together with several more, which limited space forbids us to mention, the American Grain Cleaners

Clean more thoroughly, Have a larger capacity,
Are more compact, Require only half the power,
Are cheaper to install and
Cost less to operate and maintain.

These machines are built in two styles: All Steel and in Combination Wood and Steel Construction.

Improved Automatic Traveling Brushes are furnished with the machines when so ordered.

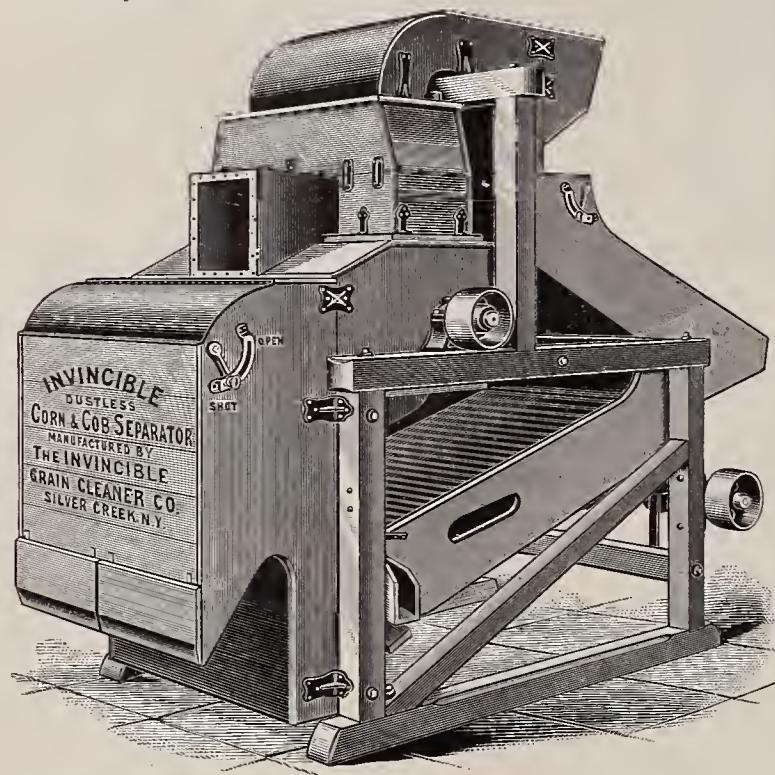
An inquiry will bring further details of great interest to every user of grain separators.

American Machinery & Construction Company
103 West Water Street, Milwaukee, Wis.

CLEAN YOUR CORN

This Separator takes out cobs, silks and all foreign matter and gives a high grade of corn.

It is the most popular corn and cob separator on the market, the result of its extremely nice work. Order now.



INVINCIBLE GRAIN CLEANER COMPANY
SILVER CREEK, N. Y., U. S. A.

REPRESENTED BY

J. H. Pank, 512 Traders' Bldg., Chicago, Ill.
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C. L. Hogle, 526 Board of Trade, Indianapolis, Ind.
Chas. Beatley, Terminal Hotel, St. Louis, Mo.
N. B. Trask, Lochiel Hotel, Harrisburg, Pa.
J. J. Ross Mill Furnishing Co., Portland, Ore.

GURNEY Standard Scales

The great majority of the elevators throughout the Canadian Northwest are equipped with Gurney Scales.

Also found in terminal elevators in Halifax, St. John, Quebec, Montreal, Sarnia, Midland, Fort William, and a recent order was for the complete scale equipment (ten 2,000-bushel hopper scales) for the Grand Trunk Pacific Railway elevator at Fort William.

**Write us for Estimate on Your Scale Equipment
for Delivery Either in Canada or United States**

Scales of every description, including the best type of Automatic scales.

THE GURNEY SCALE CO.

Established 1856

Hamilton, Ont., Canada.

MONTREAL

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CONSTANT MACHINERY

IS WHAT YOU WANT

THE SAFETY MAN LIFT

has roller bearings, which makes it easily operated. The improved brakes and safety catch prevent accidents. The adjustable counterweights and springs make it all that could be desired. Buy ours; it pays.

THE B. S. C. CHAIN FEEDER AND DRAG

for feeding elevator boots and shellers, any capacity, any distance, automatically. Handles all kinds of grain without waste or mixing.

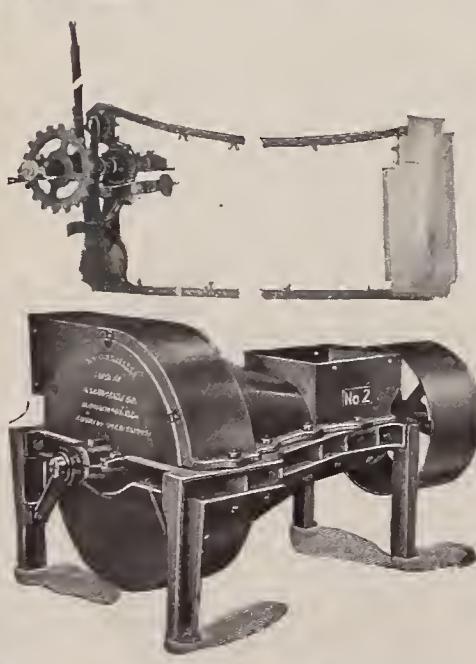
The ONLY WAY to feed a sheller.

THE U. S. CORN SHELLER

Patented Oct. 17, '05.

No pit or lower hopper. Cheapest installed. Quickest repaired. Our new Screw Adjustment can be used while sheller is full of corn and running. Shells clean, saves cobs. TRY IT.

Write for our catalog or you may miss something good



B. S. CONSTANT CO., Bloomington, Ill.

Elevator Machinery and Supplies

FLOUR AND FEED MILL MACHINERY

STEAM AND GAS ENGINES

Pulleys, Shafting, General Power Transmission Machinery, Roll Grinding and Corrugating

Largest Factory and Stock in Western Country

SEND FOR 450-PAGE CATALOG.

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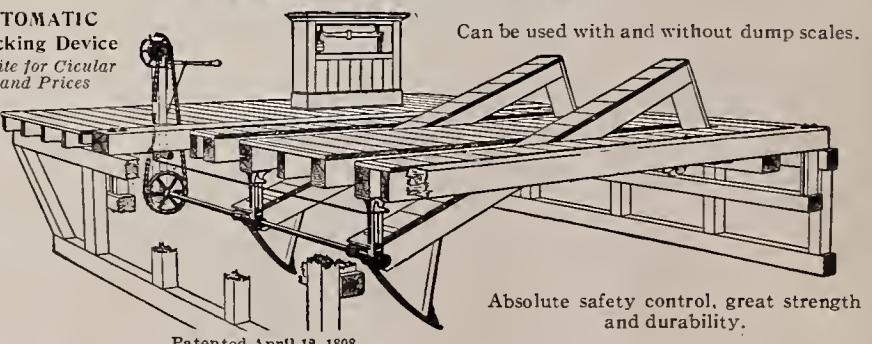
General Office and Factory
LEAVENWORTH, KAN.

Warehouse and Salesrooms
1221-1223 Union Ave.
KANSAS CITY, MO.

THE EVANS CONTROLLABLE WAGON DUMP

THE BEST WAGON DUMP BUILT

AUTOMATIC
Locking Device
Write for Circular
and Prices



Can be used with and without dump scales.

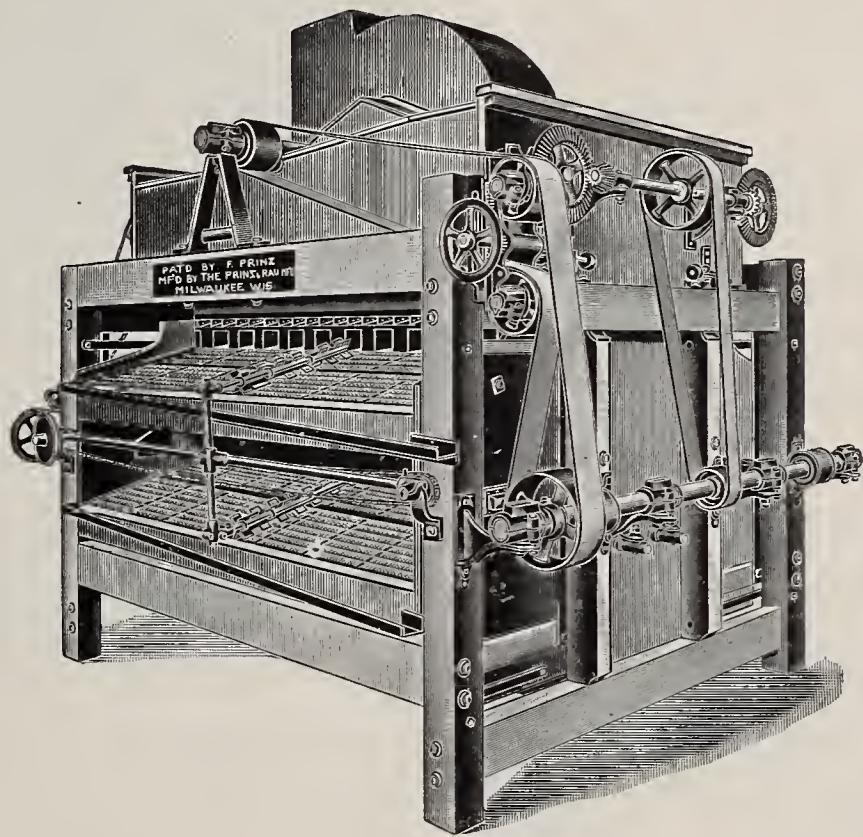
Patented April 12, 1898.

Absolute safety control, great strength
and durability.

MOULTON & EVANS,

Minneapolis, Minn.

FOR PERFECTLY CLEANING GRAIN PRINZ AUTOMATIC SEPARATORS HAVE NO EQUALS



They have many exclusive features that appeal to practical grain men.

Their **Perfect Automatic Traveling Sieve Cleaners** insure absolutely clean sieves at all times.

The **Sheet Steel Screens**, with seed screen at the head of each sieve, stand the hardest kind of service and still retain their shape.

Perfect Ventilation is insured by a large fan, and a **Perfect Automatic Feeder** spreads the grain the entire width of sieve.

The most compact separators built, occupying the minimum floor space per bushel capacity.

Write for Descriptive Circulars

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Represented by W. G. Clark, 415A La Salle Ave., Chicago, Ill.; A. H. Kirk, 1-A Chamber of Commerce, Minneapolis, Minn.; G. M. Miles, 1057 Pierce Bldg., St. Louis, Mo.; F. E. Lehman, 124 Board of Trade, Kansas City, Mo.; C. H. Near, 770 Ellicott Square, Buffalo, N. Y.; M. D. Beardslee, 106 Piquette Ave., Detroit, Mich. European Representatives, Ingenieur Bureau, Prins Mauritsplein, La, The Hague, Holland.

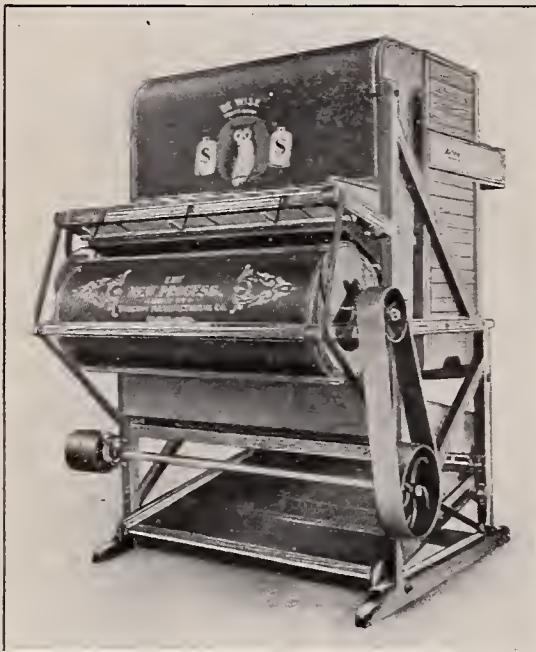
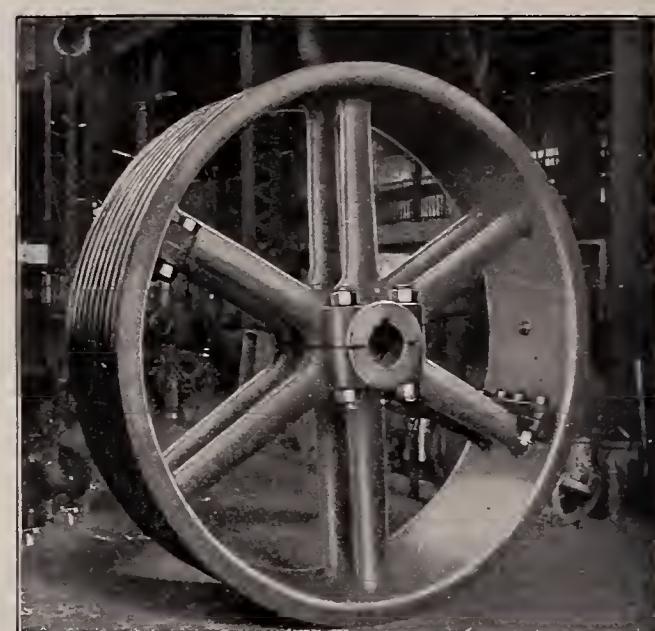
Rope Drives

We design and install complete rope drives. We are experienced in this line, and drives designed by us are successful. We supply the best grade of Manilla rope. Our **Machine-molded sheaves** are perfect in balance, accurately finished and free from flaws injurious to the rope.

We cast and finish sheaves of all sizes—English or American system—Pulleys, Band Wheels, Flywheels, Drums, Gears, Sprocket Wheels, etc. We manufacture Shafting, Pillow Blocks, Hangers, Floor Stands, Elevator Casings, Heads and Boots and all kinds of Elevating, Conveying and Power-Transmitting Machinery. Headquarters for Supplies.

H. W. Caldwell & Son Co., Chicago

Western Ave., 17th-18th Sts.
NEW YORK, Fulton Bldg., Hudson Terminal, 50 Church Street



The New Process Dustless Elevator and Warehouse Cleaner

FOSSTON MANUFACTURING CO. ST. PAUL, MINNESOTA

Builders of ELEVATOR and MILL SEPARATOR MACHINERY

Our New Process Cleaner and Separator

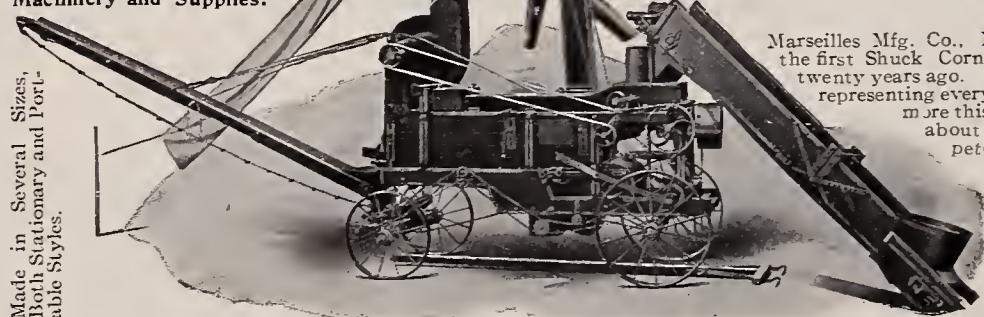
is a thorough, complete and successful machine, built for practical use and to meet the conditions as they are found today.

It embodies new and exclusive features found on no other cleaner in the market, the most important of which are fully covered by our patents.

Our machines are specially adapted for separating wheat, oats and different kinds of mixed grain. Write for Special Catalogue.

NEW MARSEILLES DUSTLESS CYLINDER CORN SHELLERS

WE MAKE Hand and Power Corn Shellers. Horse Powers, Feed Grinders, Portable Elevators and Wagon Dumps, Pump-Jacks, Grain Elevator Machinery and Supplies.



MARSEILLES MANUFACTURING COMPANY, Marseilles, Ill.

POSITIVELY GUARANTEED to shell either shucked or unshucked corn faster, with less power in proportion to capacity; take the corn off the cobs cleaner; clean both cobs and corn more perfectly; do less crushing or grinding of corn or cobs and save a larger per cent of the corn than any other cylinder sheller on the market. Send for Catalogue.

SPEAKS FOR ITSELF

Gainesville, Texas, May 12, 1908.
Marseilles Mfg. Co., Marseilles, Ill.—Gentlemen:—We purchased the first Shuck Corn Sheller you ever made, some eighteen or twenty years ago. Since then we have bought 12 or 15 of them, representing every improvement, and expect to buy several more this season. We have bought one or more of about every other make and think we are competent judges of such machinery. Your Shellers husk and shell the corn off the cob more thoroughly; save it more completely; clean both the shelled corn and the cobs more perfectly; require less power in proportion to capacity, are more durably constructed and cost less, loss of time and cost of repairs considered, than any sheller we have ever used. We have thrown out every other kind of Corn Sheller we ever bought and have replaced them with yours. KEEL & SON. By J. Z. Keel.

Branch Houses and General Agencies at Principal Distributing Cities.

THE "NEW ERA" MANLIFT
was originated by us. It is the easiest running. The perfect working brakes and safety locks prevent accidents. A good manlift pays one well. Buy ours. NO FALLING, NO ACCIDENT, NO BOTHER Be sure to get our prices. Mention this paper.

SIDNEY ELEVATOR MFG. CO.
SIDNEY OHIO

ROCKFORD Address Dept. 7 **ROCKFORD ENGINE WORKS**
Rockford, Ill., U. S. A. The Engine that will please you.
The ELEVATOR ENGINES From 2 to 30 H. P. any style. Write for special price. NEAT—NOBBY—HANDY
See ad. on this paper.

SEEDS

THE ALBERT DICKINSON CO.
DEALERS IN
GRASS SEEDS, CLOVERS, FLAX SEED, LAWN GRASS, BEANS,
PEAS, POPCORN, BIRD SEEDS, BUCKWHEAT, BAGS, ETC.
CHICAGO, Ill. Branch: Minneapolis, Minn.



Don't Buy Gasoline Engines

space occupied and practical overcoming of vibrations. Costs less to buy—less to run. Send for Catalogue.

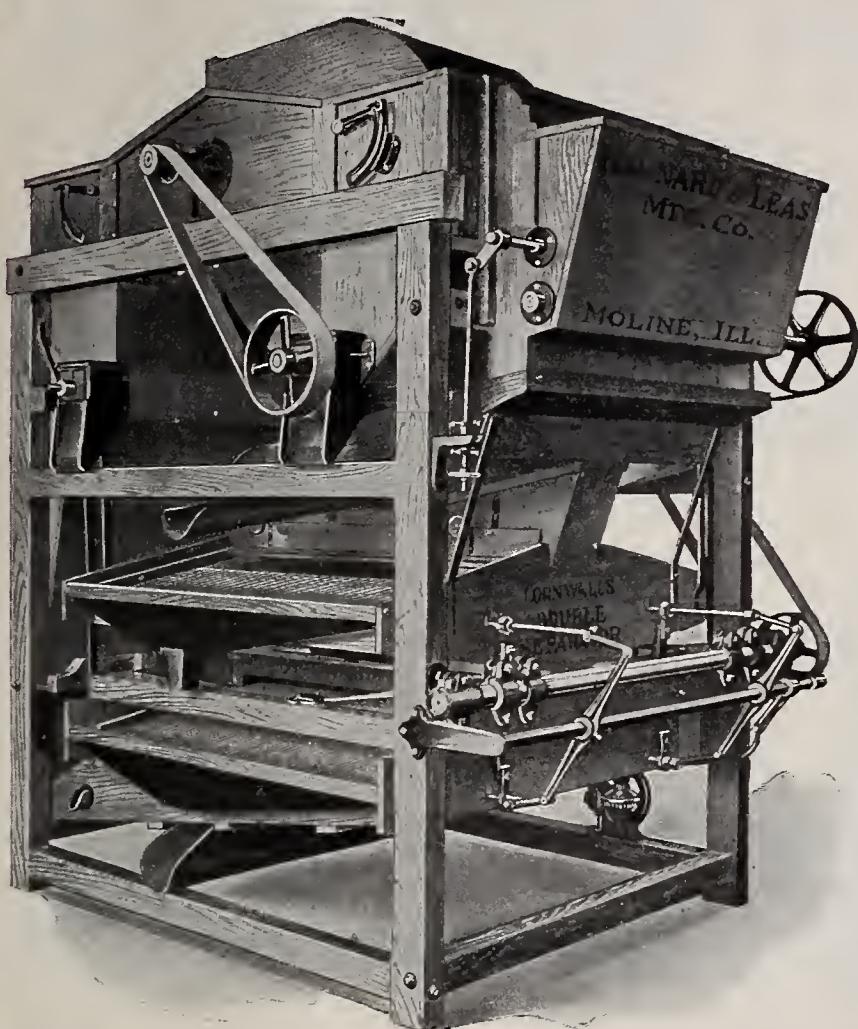
THE TEMPLE PUMP COMPANY, Manufacturers,

until you investigate "The Master Workman," a two-cylinder gasoline, kerosene or alcohol engine, superior to any one-cylinder engine; revolutionizing power. Its weight and bulk are half that of single-cylinder engines, with greater durability. Endorsed by the Board of Underwriters. Especially adapted for grain elevator work, owing to steady pull, quick and easy starting, small

This is our 55th year.

Meagher and 15th Streets, CHICAGO

CORNWALL'S DOUBLE SEPARATOR



- ¶ The latest and best elevator and warehouse separator on the market.
- ¶ Will clean all kinds of grain and seeds.
- ¶ Has both kinds of sieving motion—sieves with their motion in line with the travel of the grain for removing straw and other coarse impurities and sieves on which the grain travels across the line of motion for making very close separations.
- ¶ It removes the fine sand and seed at the head of the sieve.
- ¶ Our sieve cleaners clean every inch of the sieves several times a minute. They work under the sieves and consequently lift the trash out of the holes and cause it to tail over instead of assisting it to pass through with the grain.
- ¶ Both the air and sieve separations are at all times under the complete control of the operator.
- ¶ Every sieve is at all times in plain sight and can be removed easily and quickly without disturbing any other part of the machine.
- ¶ Other features described in our latest circular.
- ¶ We also make a full and complete line of Feed Mills, Corn Shellers and Cleaners and furnish Elevator Supplies of all kinds.

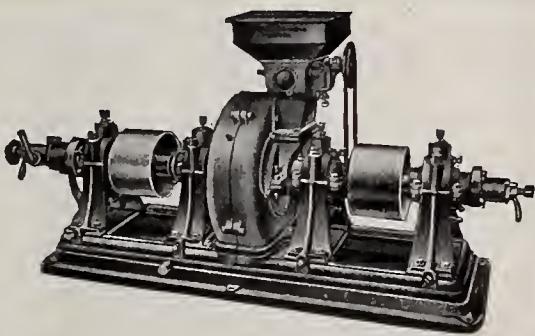
Barnard & Leas Mfg. Company

Builders of Elevator Machinery and Supplies

MOLINE, ILL.

GEO. J. NOTH, 1329 Monadnock Block, Chicago, Ill.

A Profitable
Side Line



The Monarch Attrition Mill

will enable you to add a profitable side-line to your elevator business. You can easily control the feed grinding business of your territory if you have a Monarch mill. With it you can furnish the kind of feed that farmers desire and thus insure a constantly increasing demand. We have just the mill for your requirements as we build the Monarch in number of sizes.

Send for Our New Catalogue

and learn all about the scientific grinding of feed. It treats the subject from a new standpoint and also tells why the Monarch has phosphor-bronze interchangeable bearings; cable-chain oilers; double movable base; safety spring; quick release; relief spring; special adjustable endless belt drives; hammered steel shafting; ball bearings and other improvements not found in competing mills.

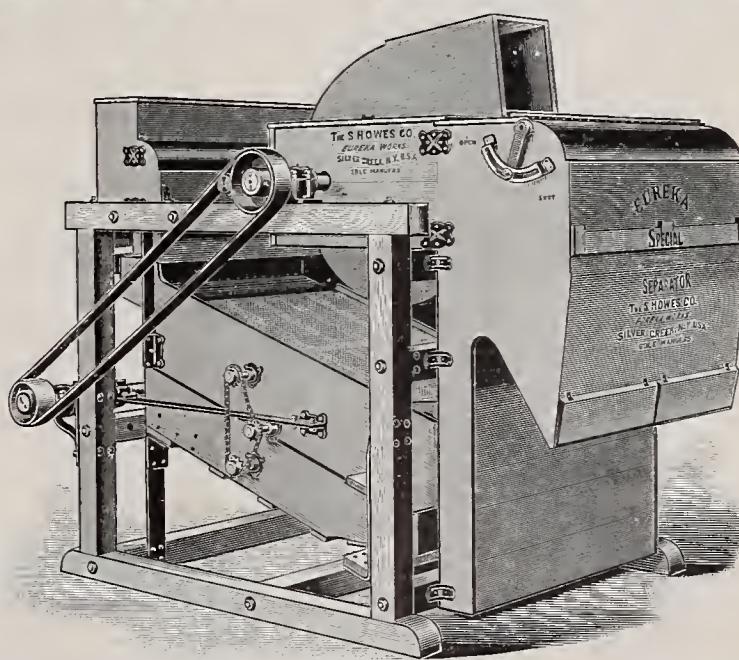
Mention amount and kind of power you expect to use for operating a mill

SPROUT, WALDRON & COMPANY

John Williams Taylor, Southwestern Agent,
491 Pacific Ave., DALLAS, TEXAS
Northwestern Branch, 301 Corn Exchange Bldg.,
MINNEAPOLIS, MINN., C. H. Mohr, Mgr.

Box 320, Muncy, Pa.

THE "EUREKA" Combined Grain Cleaner



This machine cleans all kinds of grain without changing the screens, by simply turning a lever.

Most desirable separator for country receiving elevators.
Write for full particulars and prices.

THE S. HOWES COMPANY

"Eureka" Works

SILVER CREEK, N. Y.

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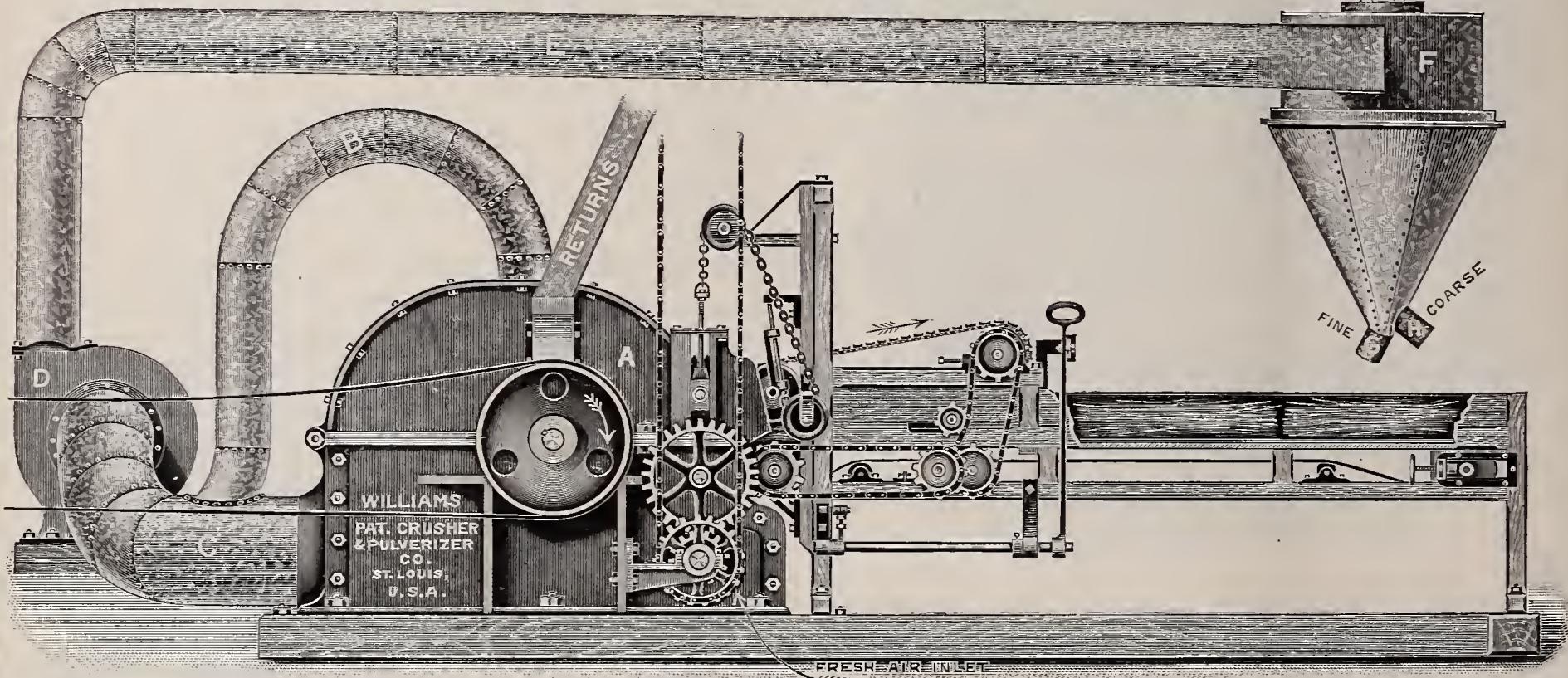
Indianapolis, Ind.	J. N. Bacon, Spencer House
Louisville, Ky.	E. R. Watson
Kansas City, Mo.	J. Q. Smythe, Hotel Savoy
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WILLIAMS PATENT COMBINED HAY AND STRAW CUTTER SHREDDER AND GRINDER

Made in 6 Sizes

50 Successful Plants in Daily Operation



THE ONLY VERSATILE FEED GRINDER EVER PRODUCED

They will reduce EAR CORN with the HUSK on.
They will reduce ALFALFA HAY from the BALE or from the STACKS.
They will reduce ALFALFA HAY and EAR CORN together.
They will reduce ALFALFA HAY and SHELLLED CORN together.
They will reduce ALFALFA HAY and OATS together.
They will reduce ALFALFA HAY and FODDER OF ALL KINDS, with the CORN on.
They will reduce ALFALFA HAY and PEA VINES.
They will reduce EAR CORN ALONE or SHELLLED CORN ALONE.
They will reduce OATS ALONE.
They will reduce ALFALFA HAY and two other kinds of CEREALS at the same time, as each machine has three separate feeding places.

We have a corps of competent milling engineers in the field making estimates and taking contracts for the installation of complete alfalfa meal plants, from the stump up.

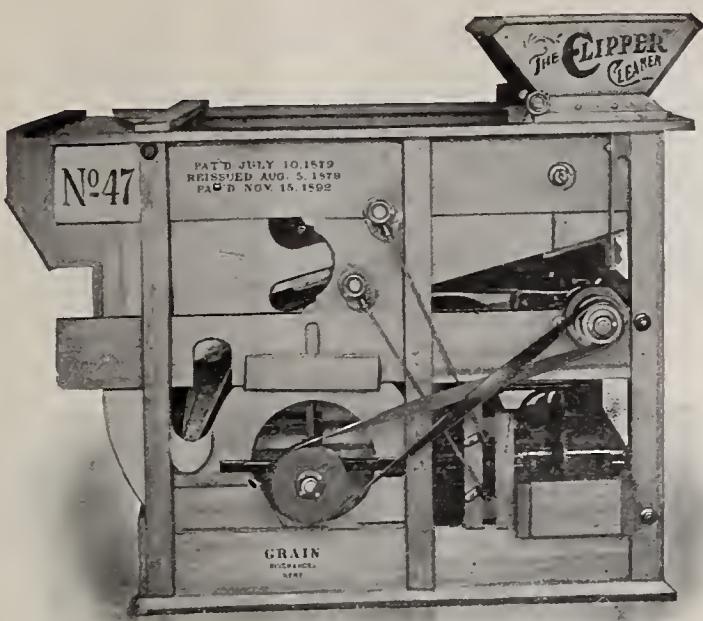
For Further Information
Write for BULLETIN No. 7

Southwestern Representative: A. G. Olds, Care Manhattan Hotel, Wichita, Kan.
Northwestern Representative: J. J. Ross Mill Furnishing Co., Portland, Ore.
Pacific Coast Representative: O. J. Williams, 428 Monadnock Bldg., San Francisco, Cal.

They will reduce ANY FORAGE material or CEREAL, together or separately.
They will reduce GREEN CORN from the field.
They will reduce CLOVER HAY, TIMOTHY or ANY KIND OF STRAW.
They are CUTTERS when desired, GRINDERS when desired and SHREDDERS when desired.
They are COB CRUSHERS when desired.
They will reduce COARSE OR FINE by changing cages.
They will reduce OAT HULLS, RICE HULLS, FLAX SHIVES or any other FOOD MATERIAL.
They produce two grades of goods AT THE SAME TIME, coarse or fine BY OUR COMBINED SYSTEM OF COLLECTING AND SEPARATING.
They WILL GIVE DOUBLE THE CAPACITY FOR THE POWER EXPENDED AND COST FOR REPAIRS OF ANY KNOWN GRINDER ON EARTH.

Write for Catalog of the Noxon Automatic Hay, Meal and All Around Feeder

THE WILLIAMS PATENT CRUSHER & PULVERIZER COMPANY
ST. LOUIS, MO., U. S. A.



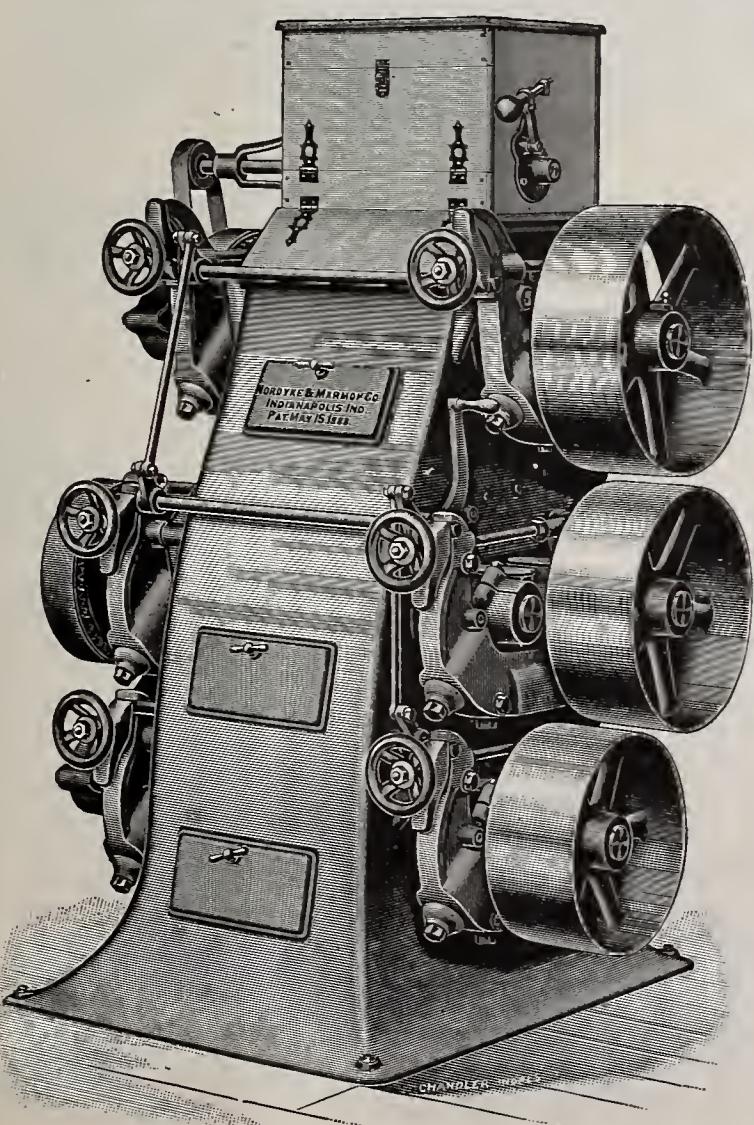
The No. 47

Clipper Cleaner

is unequaled for handling seeds or grain in local elevators. This machine has Traveling Brushes on the screens, which enables you to keep it working to its full screen capacity all the time. It is very light running, strongly built, easily installed and simple in operation. We guarantee this Cleaner to give perfect satisfaction on clover seed, timothy or any kind of grain, and it can be

operated with one-fourth the expense for power of any suction cleaner on the market. It will not require over one-half of one horsepower on clover or any kind of seed, nor over one horsepower on grain. If you are looking for a first-class, up-to-date cleaner of moderate capacity, we would be glad to send you catalog and give prices and particulars upon request.

A. T. FERRELL & CO., Saginaw, W. S., Mich.



The N. & M. Co.

THREE-PAIR-HIGH SIX-ROLLER MILL

The most substantial, most economical in cost of maintenance. Has great capacity and requires comparatively small power. The only Six-Roller Mill with drive belts properly arranged to place the belt strain on bottom of bearings, where it belongs. It is not the cheapest mill in first cost, but it is by long odds the cheapest in the long run. It is without question the best roller feed mill on the market. Feed grinding pays best when you have a mill which will do perfectly any kind of grinding required and stand up under hard work without breakages and delays.

Send for Catalogue

ELEVATOR SUPPLIES

We carry a complete stock of Heads and Boots, Elevator Buckets and other Elevator Supplies. All orders are given the very best of attention.

Nordyke & Marmon Company

America's Leading Flour Mill Builders

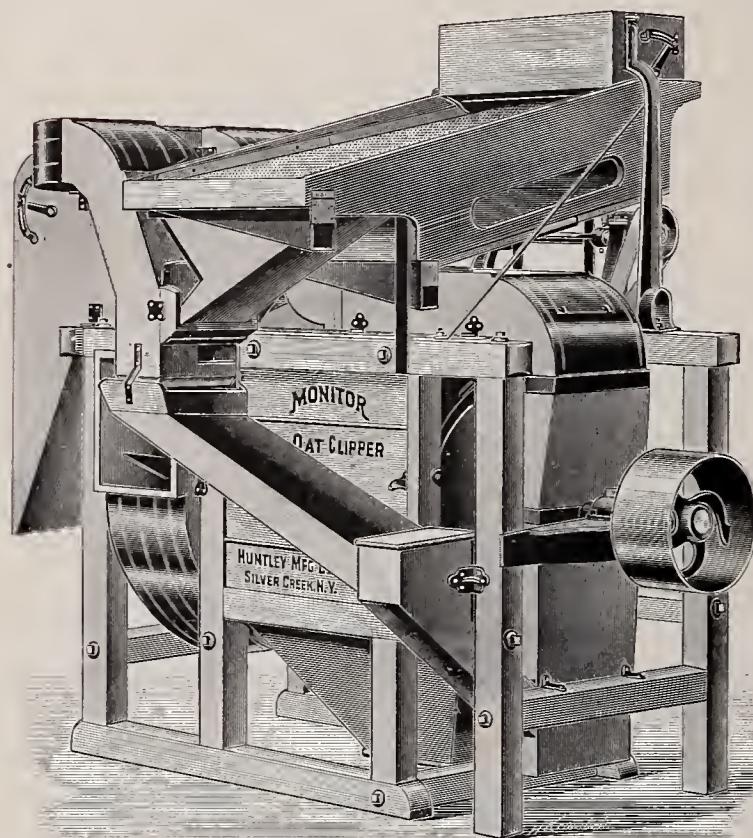
Established 1851

INDIANAPOLIS, IND.

WELL KNOWN THE WORLD OVER

MONITOR GRAIN AND SEED CLEANERS

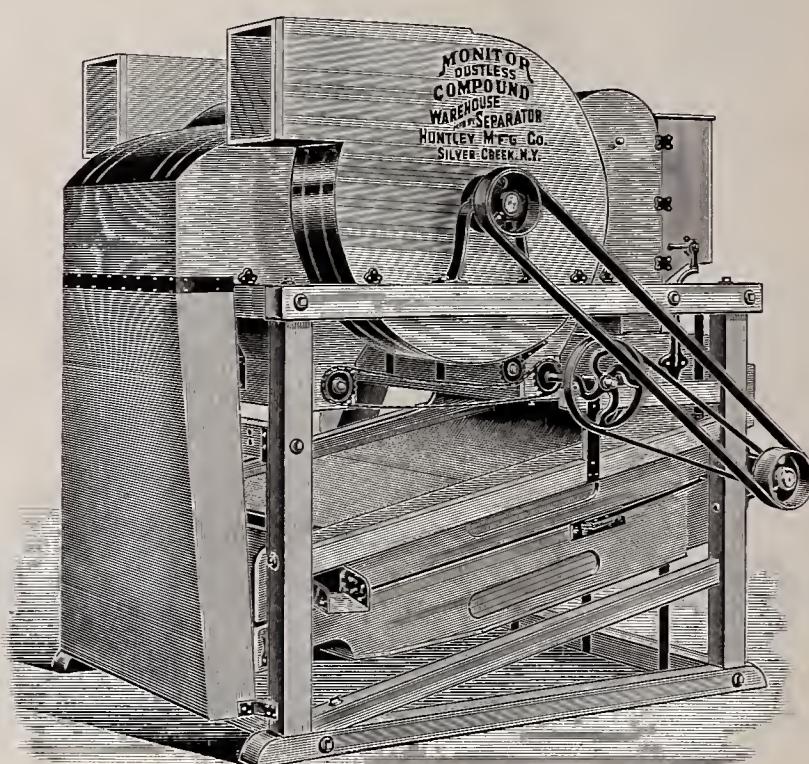
We are the world's largest manufacturers of grain and seed cleaning and grading machinery



The Monitor Combined Clipper and Cleaner

¶ Used as an oat clipper, this machine gives perfect results on any class of work. For use as a receiving cleaner, the "by-pass spout" is attached, giving two screen and two separate air separations.

¶ As a combined clipper and cleaner this machine has no equal.



The Monitor Automatic Elevator Separator

¶ This machine is equipped with our new improved style of deep reservoir ring oiling bearings, patented automatic disc-oiling eccentrics, air equalizing device and automatic sieve cleaning attachment. Undoubtedly the most successful cleaner on the market.

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of grain and seed cleaning and grading machinery, designed for elevator service, constitutes the most extensive assortment of entirely successful machinery of this character manufactured in the United States.

HUNTLEY MFG. COMPANY

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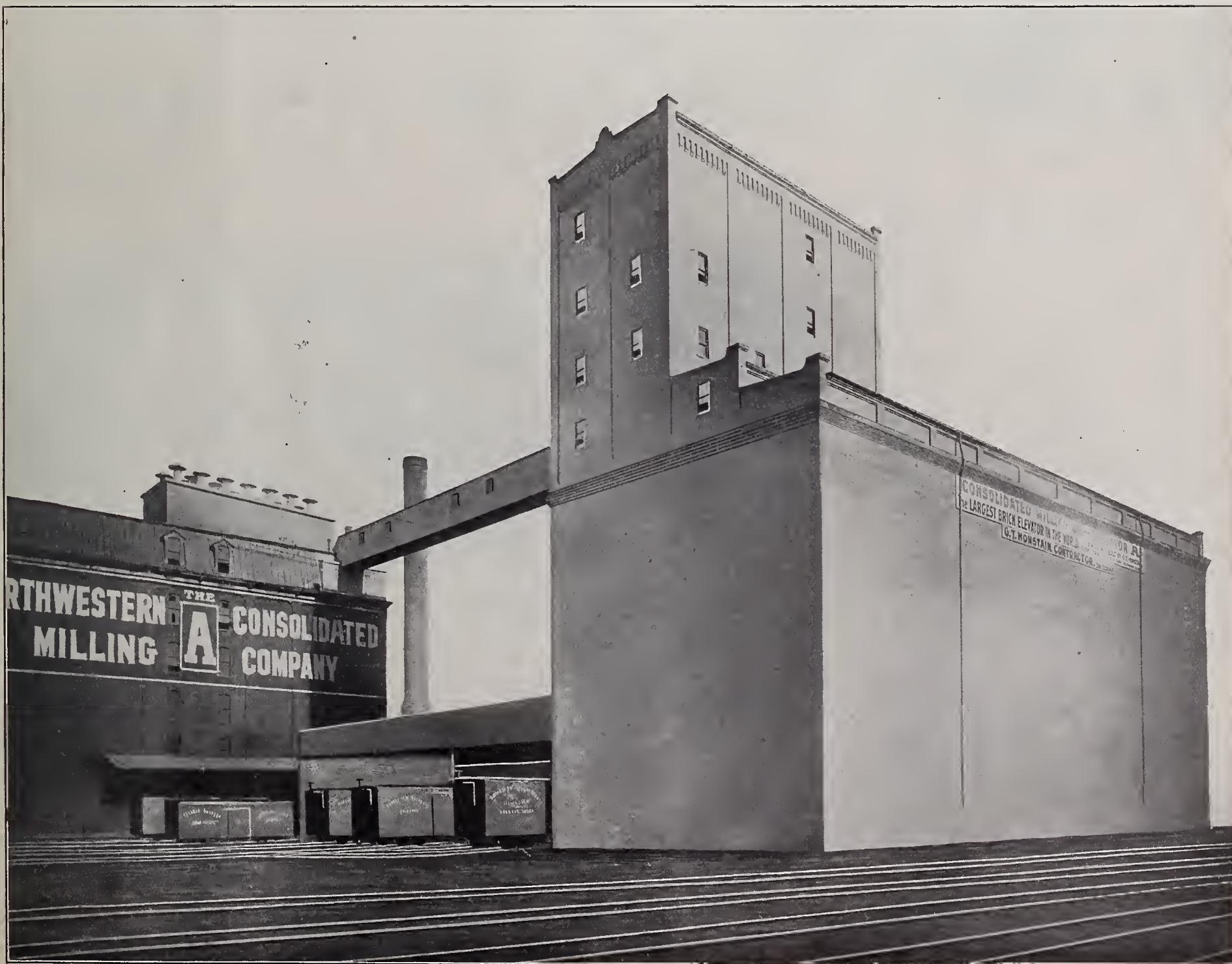
THE AMERICAN ELEVATOR AND GRAIN TRADE.

A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

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SINGLE COPY, TEN CENTS.



LARGEST BRICK MILL ELEVATOR IN THE WORLD, OWNED BY THE NORTHWESTERN CONSOLIDATED MILLING COMPANY, MINNEAPOLIS.
G. T. Honstain, Minneapolis, Engineer and Contractor.

NEW ELEVATOR FOR THE NORTHWESTERN CONSOLIDATED MILLING COMPANY.

The handsome and imposing structure shown in the illustration on the preceding page, which happens to be the largest grain elevator for a flour mill

inner wall of the bins and the reinforcing material cannot be reached by the heat from the outside.

Through the car shed run four tracks laid over two receiving pits to each track, or eight in all. Each receiving pit holds 2,500 bushels of grain and each has its belt conveyor to the two receiving legs of the elevator. These conveyor belts have a ca-

to the Prinz & Rau Grain Cleaners. There are two of these machines, each with a cleaning capacity of 7,000 bushels per hour. The grain is then discharged upon conveyor belts, by which it is distributed and carried to any bin in the house. There are two of these belts with a capacity of 10,000 bushels per hour each.

When the grain has reached the bins it remains in storage until needed at the mills. When the time comes for withdrawing it for consumption, it is drawn from the bins upon one of two conveyor belts and discharged into the mill elevator boot. It is thence taken to the top of the building, deposited in a 2,000-bushel garner from which it passes into a 1,000-bushel Fairbanks Hopper Scale, where it is weighed and thence discharged upon the conveyor belt which runs through one of two galleries leading to the mill. One of these is 115 feet in length leading to the "Crown A Mill," while the other is but 30 feet in length, leading to the "Standard Mill."

The elevator is equipped with the Day Company's Dust Collecting System. All machinery is electrically driven by 21 motors built by the General Electric Company, ranging in size from $5\frac{1}{2}$ horse to $50\frac{1}{2}$ horse power. The legs are driven with rope drive and are equipped with the Evans Back Stop to prevent the leg from backing up and choking.

The elevator has been in operation less than three months, but has made a record for economy in the handling of grain that is the best of testimony to the correct principles of its design and the excellence of its arrangements and equipment.

INSPECTION SHAKE-UP.

Jurisdiction over the grain inspection in Washington having been transferred to the Railroad and Warehouse Commission, it is premised that J. W. Arasmith, long chief inspector, will "walk the plank" at the order of Governor Hay. The law expressly provides that, although the appointment is nominally under control of the Railroad Commission, it can only be made with the Governor's approval.



N. CONSOLIDATED MILLING CO.—SHOWING MANNER OF STARTING BIN WALLS AND REINFORCING. in the world constructed exclusively of brick, is located in the famous milling district of Minneapolis, and handles grain for the Northwestern Consolidated Milling Company's "Crown A Mill" and "Standard Mill." The elevator, with a capacity of 1,000,000 bushels, was designed and constructed by G. T. Honstain, grain elevator builder of Minneapolis. The construction work was begun on April 15, 1908, and the house was formally opened on January 26 of the present year.

The elevator rests on a concrete foundation laid on solid rock, beginning at twenty-six feet below the street grade. Its dimensions are 80x196 feet, with a car shed 85x83 feet in size. The cupola is 40x80 feet in size and the total height of the building from the surface to the top of the cupola is 165 feet.

There are in all 57 bins, 32 of which are 19 feet square and 93 feet high, giving a capacity each of 26,000 bushels; 20 bins are 9 feet square and 93 feet high, giving a capacity of 6,000 bushels each. The remaining 5 bins are 7x19 feet x 84 feet high, giving a capacity each of 10,000 bushels.

The bin construction is shown in two of our illustrations. They are square and embody the Honstain & Cooley patents. The walls are 8 inches in thickness and are reinforced with band-iron linked at the corners with crucible steel links. They are further reinforced with corner rods running through V-shaped piers of reinforced concrete. The bands are placed at every 9 inches for the first 30 feet; and are placed 9 and 12 inch intervals alternating for the second 30 feet, while for the third 30 feet they are 12 inches apart. The rods are placed 4 feet apart, the size of the rods being $1\frac{1}{2}$ inches, $1\frac{1}{8}$ inches and $1\frac{1}{4}$ inches. The bands are 4 inches wide and made of No. 9 and 10 steel.

The wall is further protected by a 4-inch air space and an outside 4-inch wall of brick as a veneer. This air space, which is a special feature of this type of construction, entirely eliminates all possibility of moisture reaching the grain, and a test at the Minneapolis Brewery, in bins there with air spaces, the interspace showed but 3 per cent of moisture. The air spaces are also a protection against fire originating in other and adjacent buildings, because the



NORTHWESTERN CONSOLIDATED MILLING CO.—BELT CONVEYOR FROM SCALES TO BINS.

toms, which is shown in one of the accompanying illustrations. Each elevator leg has a capacity of 10,000 bushels per hour. When the grain reaches the top of the elevator it falls into two garners, each having a capacity of 2,000 bushels, after which it is weighed on one of two Fairbanks Scales of 2,000 bushels' capacity each, and then the grain moves on

In effect this places the appointment wholly in the hands of the executive; and a local authority says: "It is a well-known fact that Hay approves this scheme. The Railroad Commission probably will have no difficulty in understanding that the executive is the real appointive power and will not undertake to dispense that piece of patronage."

[For the "American Elevator and Grain Trade."]
THE UNITED STATES CORN GROWER VINDICATED.

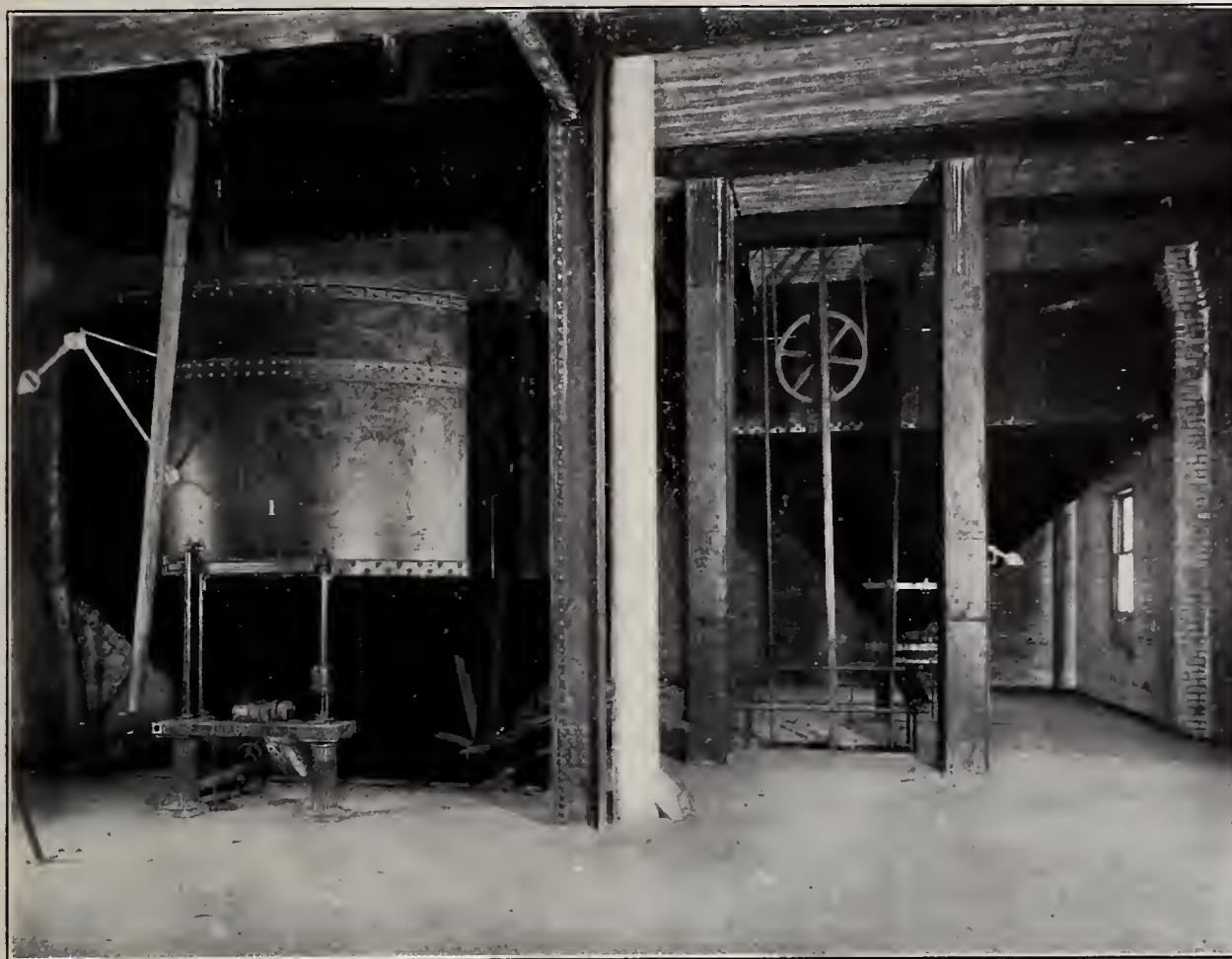
BY F. S. RUTHERFORD.

In the year 1908 the United States farmer produced 80 per cent of the world's corn crop. It is

agricultural journals obtainable. And what he does not learn in "his paper," he will "pick up" when he goes to market or when exchanging views around the friendly stove or sitting on the counter in the historic country store. Agricultural colleges, agricultural papers, grain journals, grain dealers' associations, country grain dealers and railway interests

it shows that 935 out of 1,000 cars of American corn were in such excellent condition as to command five cents a bushel more in the European markets than corn grown in any other country. It is to be hoped that Mr. Shannahan thought to remind the European grain merchants complaining of this slight percentage of American corn arriving out of condition that sometimes grain crops in other countries than the United States are damaged by rains, resulting not infrequently in large quantities of their grain arriving at European markets out of condition.

Considering that no inconsiderable quantity of American corn is accumulated at the American seaboard during the winter before the corn is thoroughly cured, and that the United States exporter does not, as a rule, bid the country grain dealer for the high-class corn, but rather for a grade below (No. 3), it certainly speaks well for the United States corn grower that 935 out of 1,000 cars of corn exported from his raising is of so high a quality that it commands five cents per bushel more in the European market than corn from any other fields in the universe. Were the exporters of the United States to exercise a little more caution in their selection of grain for export, every kernel of United States grown corn sent to Europe would arrive there in perfect condition. As it is, there is nothing serious in the situation, as the United



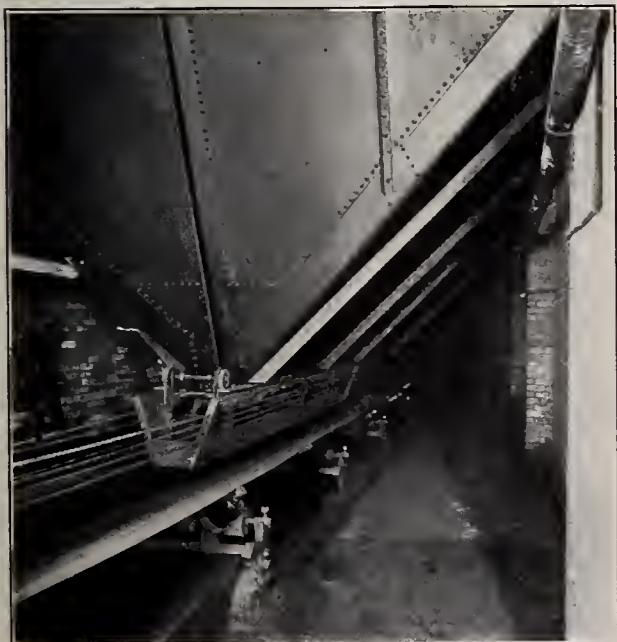
NORTHWESTERN CONSOLIDATED MILLING CO.—FAIRBANKS HOPPER SCALES AND GARNERS.

preposterous to suppose it possible that he upon whom devolves the task of producing practically the corn supply for the world would plod along blindly in the prosecution of the work. The assertion that the corn produced in the United States is inferior to that grown in other countries in yielding, feeding or keeping qualities is an unwarranted slander upon the farmer of this country, and can only be uttered in ignorance of the facts. There is no more progressive nation on the globe than the United States. There is no individual in the universe more keenly alive to the existence of his necessities, or more industrious in intelligent effort to relieve those neces-

have contributed liberally toward educating and stimulating the American farmer to the proper selection of seed corn. Seed growing concerns, in their own business interest, have propagated seed corn to almost the acme of perfection.

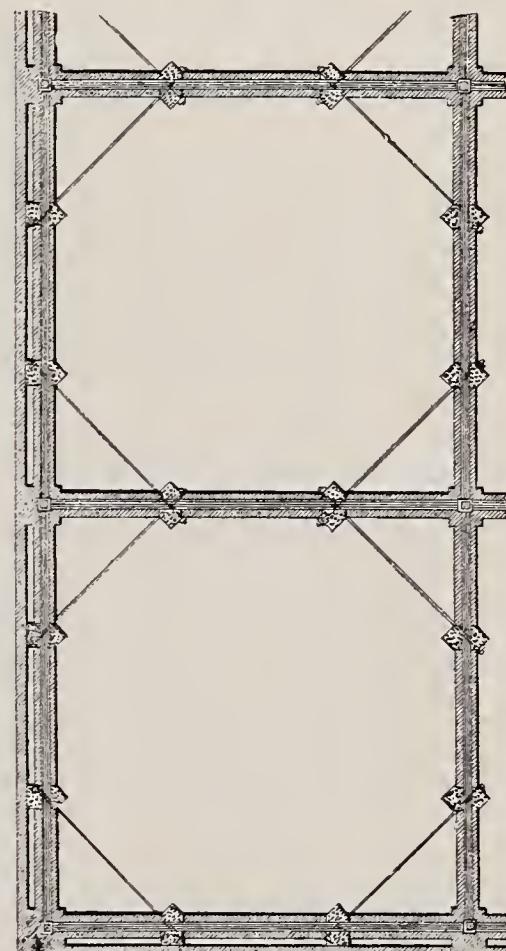
Feeding to his own live stock an average of 80 per cent of the corn he raises, the United States farmer fully appreciates the importance, in his own interest, of planting seed that will produce a crop of corn heavy in yield and of high feeding and keeping qualities. He sells only what corn he has left over, and, primarily producing it for his own use, he aims to produce the very best. He is competent to make a proper selection of seed, he procures good seed and plants it, and he produces corn crops heavy in yield and nigh unto perfection in feeding and keeping qualities. One of the best evidences of the high keeping quality of corn grown in the United States is the record of a St. Louis grain commission merchant, showing that in the germinating season, in the month of June, 1908, he received corn consignments from Iowa, Illinois, Nebraska and Missouri of which every car but one graded No. 2—No. 2 yellow or No. 2 white—after having been in transit from one to several weeks in a tightly closed box-car, with the hot sun beating down upon it. If the corn had not been of the highest quality and in perfect condition it could not have withstood the tremendous heat it was subjected to in the tightly closed car in the germinating season.

Mr. J. D. Shannahan, of the United States Department of Agriculture, stated in his address before the Kansas Grain Dealers' convention, February 3, 1909, that European dealers informed him that American corn in good condition would bring at least five cents per bushel more in the European markets than corn grown in any other country, which, indeed, should swell the heart of the United States farmer with pride, and refute forever the insinuation that American corn is inferior to that grown in other countries. Mr. Shannahan also stated that of the American corn received at European ports during the season of 1908 6½ per cent was out of condition, which is a pleasingly powerful vindication for the United States corn grower, as



NORTHWESTERN CONSOLIDATED MILLING CO.—SHOWING BELT CONVEYOR FROM RECEIVING PIT.

sities, than the farmer of this country. There is no being on earth more thoroughly informed on matters affecting his personal interests than the farmer of the United States. He may not read the daily newspaper, but it is an assured fact that he "takes the weekly," and is a studious reader of the best



THE HONSTAIN-COOLEY PATENT SYSTEM OF BIN CONSTRUCTION.

States exporter, and not the European grain dealer, is the one who must stand for the loss resulting from his corn arriving in Europe out of condition. But all honor to the United States farmer, to the seed corn he plants, to the crop he raises, and to his method of caring for it.

J. W. Raymond of Spokane, superintendent in eastern Washington and Idaho for the Puget Sound Warehouse Company and the Everett Grain and Warehousing Company, has announced a reduction of 25 cents a ton for handling wheat by those concerns, beginning June 1, this reduction being a return to the rate of 50 cents a ton as it was two years ago. The Pacific Coast Elevator Company, owned by the same interests, will probably make the same reduction. The Puget Sound and Everett Companies own and operate 130 warehouses in Washington, Oregon and Idaho, 53 of which are under the charge of Mr. Raymond. The Pacific Elevator Company has about the same number of houses. The approximate amount of wheat handled yearly by the first named companies is between 5,500,000 and 7,000,000 bushels.

[For the "American Elevator and Grain Trade."]
CURING CORN.

BY J. R. BOWIE, TENNESSEE.

I read in the March issue of the "American Elevator and Grain Trade" an article headed "Export Corn." The writer does not believe with the writer of that article, that the bad condition of the corn arriving in the European markets is at all due to the variety of corn, but that it is entirely due to the way in which the corn is handled from the time it is pulled from the stalk until it is loaded on board ship for Europe.

I have handled thousands of bushels of Western corn, and can speak with some authority in regard to the condition in which the corn usually arrives at its destination, carried by rail to the Eastern markets. I have a number of times unloaded corn that was hot in the car; did it absorb dampness in transit? I would say, hardly. The truth of the business is: it was gathered from the field too soon after maturity, taken to the elevator too quickly, shelled and stored; then the curing process was undertaken, which was begun "too late in the game" to make a success of the operation. The proper time to cure corn is when it is in the ear. Let it get thoroughly dry in the ear before shelling; then you will have a corn that will make the famous Southern corn bread.

The five cents against the American corn from the West is not alone true of the European market; it is true of the East. The Eastern miller will always pay more for the native corn, simply because he cannot make a satisfactory meal out of the best grades of Western corn that he can get. I wish to make the charge here and now, that the Western farmer knows very little about curing corn for bread purposes. The Western elevator man has only been able to help the farmer by curing corn by steam, which I think a doubtful or poor remedy after the corn has started to deteriorate. If the corn could be thoroughly dried as soon as shelled, the process would likely be more successful. Nearly all the Western corn that I ever ground had a rather disagreeable sappy odor, and would grind tough and heat up the rolls or burrs in a very short time after starting up.

The only way the Western farmer or the Western elevator man can have this statement refuted is in the future to send out corn that is dry. It is hardly reasonable to lay it to the railroad company or the shipowners that the corn took up dampness in transit.

The writer has not only unloaded and handled hot corn but has bought and ground a number of ears that others had bought and paid for as good corn and let it spoil on their hands until it was hardly fit for chop feed. They could no longer sell any of it in the grain and the only way was to grind and put some pure wheat offal with it so that stock would eat it. This was before the mixed feed laws went into effect. Hereafter I would not know what to do with musty corn. So the farmers and elevator men should now be more careful about shipping wet corn.

We have to buy more or less corn from the West every year at this time, and always have a very unsatisfactory meal trade whenever we start in on the Western corn. I wish it was not so; nothing would please me better than to be able to get a corn that would make as good meal as the native article.

ADULTERATION BARRED.

In view of recent seizures by Federal and state authorities of grain in the South, that, it has been claimed, is impure under the definition of the pure food and pure feed acts, it was probably no surprise to dealers at St. Louis and elsewhere to receive notification from T. G. Hudson, Commissioner of Agriculture for Georgia, that hereafter all shipments of seeds or grains containing chaff, screenings, unlike seeds or other adulterants, would leave the shipper liable to prosecution under the food and drugs act of Georgia, unless the per cent of adulteration be marked on the package. This step has been taken, he said, because of the numerous adul-

terated shipments sent to the South within recent months. The scarcity of oats have in various instances caused shippers to mix barley with oats shipments, and this practice, it is said, has had much to do with the action taken in Georgia.

The warning from Georgia is addressed to "dealers in corn, wheat, rye, barley, oats and other seeds and grains," and reads as follows:

"Whenever any substance such as chaff, screenings, damaged, faulty or unlike seeds or grains or foreign material be mixed with or added to seeds or grains as an adulterant and the per cent of such mixture not plainly marked on the package containing it, or in which it is offered for sale, showing the true composition of the mixture or the character of the adulteration, this will be considered a violation of the food and drugs act of Georgia."

DEATH OF E. R. ULRICH, SR.

Edward von Reisenkampff Ulrich, formerly head of the well-known house of E. R. Ulrich & Sons, grain merchants at Springfield, Ill., died at Los Angeles, Calif., on March 14, 1909.

Mr. Ulrich was born at Fishkill, N. Y., on October 10, 1829. His father, Augustus Louis Ulrich, came to the United States in 1817, and built a cloth



THE LATE E. R. ULRICH, SR.

factory at Fishkill, N. Y., in which business John Jacob Astor and Philip Howe were stockholders. He was the son of Dr. Johann August Heinrich Ulrich, councillor of the Duke of Saxe-Coburg, and professor of political economy in Vienna University, Vienna. He was a contemporary and friend of Kant, Schiller and Goethe; and the University of Jena now contains no less than seventeen volumes of his rulings on philosophical topics. E. R. Ulrich's mother was a daughter of Justus Johann von Reisenkampff, collector under the Czar for thirty years at Reval, Russia. The family in Europe still maintains in its direct and collateral branches its ancient prestige as a contributor to the ranks of the leading men of the state.

E. R. Ulrich was a man of remarkable individuality, of high attainment and character, possessing great business talent and executive ability. After the death of his father in 1841, the family came to the West and settled in Springfield, Ill., where Mr. Ulrich built up the extensive grain business which he eventually turned over to his sons. He had a wide circle of friends who regarded him always as an able and high minded business man as well as a strictly upright and useful citizen. He was a generous and warm friend, and a liberal and devoted Christian, who endeavored to follow out his convictions in his daily life and practice. "His faith stood in the power of God."

His wife was Floria Van Doren Vredenburg, whom he married at Springfield in 1853, whose father, John S. Vredenburg, was at one time mayor of Springfield.

Mr. Ulrich leaves his wife, who was with him in Los Angeles, Calif., and three sons: A. L. Ulrich, E. R. Ulrich, Jr., and Chas. M. Ulrich; also three daughters, Mrs. Frederick Kinsman of Berkeley, Calif., Mrs. B. G. Pinkerton and Henriette Ulrich, of Los Angeles. There is also a brother, Bartow A. Ulrich, Chicago, who was educated as a lawyer, but is in the real estate business. He is a frequent contributor to the press and magazines on governmental topics. There is also a sister, Mrs. Augusta Mack, mother of Judge David E. Mack, of Carthage.

Owing to the delicate health of the widow the body of Mr. Ulrich was not brought home to Illinois but was buried at Los Angeles.

KANSAS CITY HIT BY THE I. C. C.

Kansas City has been hard hit by the Commerce Commission in the matter of Gulf and Texas rates on grain from Kansas in a report and decision published on March 13. The complaint is No. 1509, entitled, Kansas City Transportation Bureau, etc., et al. vs. A. T. & Santa Fe Ry. Co. et al. The complaint in this case was made to set aside a decision on cases Nos. 918 and 919 which readjusted a rate that forced, or attracted, Kansas grain to Kansas City instead of permitting it to move on lower rates to the Gulf ports for export and to Texas convening points, by prescribing "specific through rates to Galveston for export," and to conserving Texas points, "lower than the sum of the local rates to Kansas City and the proportionate rates from Kansas City." To this readjustment Kansas City objected, hence this complaint, and petition for a restoration of the former rates that had been set aside.

The complainants stated that Kansas City is a primary grain market, being so located geographically as to afford the producers of Kansas and other neighboring states a ready and general market for their products and that it is served by many lines of railroad, which create there active competition which is of benefit to the producers and the public. It is alleged that through rates from point of origin to destination in Texas and to the Gulf ports for export, which are less than the combination rate on Kansas City, have the effect of diverting the grain from the Kansas City market to the injury of the plaintiffs. No attack was made upon the reasonableness of the rates, the only complaint being that the rate being lower to Gulf and Texas, "they create undue prejudice and disadvantage against Kansas City dealers"—who, in other words, would have the forcing advantage of the former rates. Some side issues were brought into the complaint, which were set aside, and an examination of comparative facilities is made in the report, not of much general interest. The main thing is the principle enunciated in the decision, towit, that in the original case, No. 918 and 919, which is that "the territory in which this grain was grown and the growers were entitled to the benefit of their proximity to the Gulf and to the great consuming territory in Texas, and of their direct lines of transportation, without moving their grain through or paying tribute thereon to the Kansas City market."

The Commission goes on to say, in conclusion:

If the carriers upon whose lines the traffic originates can carry it to the Gulf, or to destinations in consuming territory in Texas, over their own lines, more advantageously and economically and at lower rates to the shippers than they can carry it through Kansas City, we find it difficult to see how the public interests would be served by breaking up that adjustment and imposing upon this grain higher transportation charges. . . . The complaint here is that the adjustment ordered by the Commission has attracted grain away from Kansas City markets which otherwise would go there. That was the expectation and intent of the Commission in its former decision.

Kansas City is one of the great grain markets of the world. It has great transportation facilities. It has had the advantage of the foresight and enterprise of those who established a grain market there before any other was established in near-by territory or in competition therewith. It has reaped rich reward therefrom. It is perfectly natural that it should wish and strive to maintain all of its prestige, prominence, and advantage; but since those days many lines of railroad have been built into the grain fields; short lines and cut-offs have been constructed; a great grain-growing state has been added to the Union; competitive markets have

been established; new export ports have been opened; and the new conditions so created must be given consideration. To now hold that these defendants may not make through rates over their direct and shorter routes via which they get the long haul on the business which they originate, lower than apply through Kansas City, where the grain would be marketed and be subject to diversion to the lines of other carriers, would, if discrimination in favor of Kansas City were to be avoided, necessitate similar findings for other grain markets, and so the entire profit in transportation of the grain would be eaten up in terminal services, or the value of the additional terminal services so required would have to be added to the transportation rates.

The complaint herein could be satisfied in one of three ways: (a) By reducing the rates into Kansas City; (b) by reducing the rates from Kansas City; or (c) by increasing the rates via the direct routes. The rates now in effect via the direct routes are materially reduced rates established in conformity with an order of this Commission. We have no authority to order an advance in those rates even if we were so inclined, which we are not, and, therefore, we could specifically deal with this question only by ordering a reduction in these rates to Kansas City or from Kansas City. The former would involve the whole relative adjustment of inbound rates as between Kansas City and other Western primary markets. The latter would involve the whole relative adjustment of outbound rates from every market and to every export port. We are not prepared to do either. Clearly unreasonable rates or undue and unjust discrimination should be corrected, even if long-standing adjustments must be disturbed, but here no rate is alleged to be unreasonable, and the discrimination should be corrected, even if long-standing adjustments must be disturbed, but here no rate is alleged to be unreasonable, and the discrimination alleged and complained of is, as has been noted, between an intermediate or primary market which naturally wishes to handle the grain and forward it for export to the consuming territory, and direct shipment of the grain from points where it is grown to export ports and consuming territory under lower transportation charges. We can not find that discrimination so created is undue or unjust.

It is said that the Commission could simply direct that the rates via the direct line should not exceed the combination on Kansas City. Such an order would conflict with conclusions that have been reached in other cases, would be diametrically opposed to the contentions of Kansas City interests in Burnham, Hanna, Munger Dry Goods Co. et al. v. C., R. I. & P. Ry. Co. et al., 14 I. C. C. Rep. 299, and be an abandonment of principles that have been announced as results of definite convictions which are still entertained.

It should be remembered that, as found and justified in cases 918 and 919, proportional rates from Kansas City to the Gulf for export are substantially less than the rates from points of origin directly intermediate between Kansas City and the Gulf and much nearer to the Gulf. The rates via Kansas City are now no higher than they were before our original order was entered, but under that order the grain from certain points and territory finds its way to territory of consumption and to export ports at lower rates and therefore along lines of less resistance. And this in face of the fact found in cases 918 and 919 that, under competition, rates on grain from Kansas City in all directions have been "forced down to a very low level."

If the rates herein questioned involved the ability of Kansas City to sell grain in competition with another similar market trading under similar conditions, an element of discrimination might be found which it would be proper to remedy. That, however, is not the case. It can not be said that moving the grain over direct, shorter, and more economical routes which give the long haul to the carriers upon whose lines it originates, at rates lower than would apply if it were hauled through Kansas City, unjustly discriminates against Kansas City as compared with any other city or interests similarly situated, and it follows that upon the whole record the complaint must be dismissed.

CONDEMNED OATS.

The oats seized in March at Atlanta have been reported to contain 22% of barley in addition to other grains.

The Agricultural Department of Louisiana having discovered some feed dealers of that state selling mixed grains and placing them upon the market as oats, held to be a violation of the feedstuff laws, will proceed to carry out the provisions of the acts relating thereto. All mixed grains found on the market without being tagged in accordance with the law. It is therefore announced that all will be seized.

Grain brokers in the state endeavor to justify their acts by claiming that barley, for instance, is richer in protein than oats, but the Department says it is well aware of the fact that while oats weigh thirty-two pounds, barley weighs forty-eight to the bushel; but with this it has nothing to do. The law provides against the mixing of grains, requiring all such to be properly registered and tagged, thereby giving to purchasers the privilege of buying the pure, unmixed grains, or the mixed,

if they prefer; and not to be forced to take these mixtures without being so informed. The law requires the number of pounds and the chemical analysis to be placed on each package, and the department will see to it that no infringement or violation of the law is permitted.

G. M. MILES.

G. M. Miles, who represents the Prinz & Rau Mfg. Co., of Milwaukee at St. Louis, was "born and bred" a miller and seems never to have wanted to break the habit. He is not so very old, at least not at the Oslerizing period as yet, but during his constructive career he has built and remodeled about 60 mills and programmed and started about as many more, which is "going some."

Mr. Miles was born in western Wisconsin and grew up in a little waterpower burr mill that his father built in the early '60s. In 1879 it was carried away by a flood, and he helped to rebuild it the same year. This seems to have been the first time he was "on the job" in that way. In 1884 he rented the mill and operated it on his own account for a while. In 1888 he took his first job of remodeling the same mill, which put in the roller



G. M. MILES.

system. After that he was put at this work in other places, and was kept busy in that line in various parts of the country until 1897 when the old home mill of his father burned and he went back to rebuild it a second time.

This work completed he took a position with the Dubuque Turbine and Roller Mill Company, covering the state of Wisconsin for the company to sell Planifiers. Having sold several he took charge of their installation, and started on the road again. He remained with the Dubuque company until 1902, when he went to the Nordyke & Marmón Company at Indianapolis, for whom he had done some work in 1899. He has been with the Prinz & Rau Mfg. Co., with headquarters at St. Louis, for nearly three years.

Among Mr. Miles's other accomplishments in his profession, he is familiar with rice milling as well as oat meal and corn milling in all their branches, and has several high-class mills of all these lines to his credit.

Mr. Miles, on the side, is president of the Durand Light & Power Co., of Durand, Wis., and with his two brothers controls 80 per cent of the company's stock. The three brothers still run and operate the little water power mill at Durand, which with two other feed mills, they operate with electric power furnished by the Light and Power Company.

Grain dealers at Tacoma anticipate importations of oats from Canada if present prices continue.

[Published by Permission.] CHICAGO GRAIN INSPECTION.

BY W. S. COWEN.

Chief Grain Inspector of Illinois.

The state of Illinois has by law taken upon itself the responsibility of making a grade on all grain passing through the different markets where inspections are made. If we fail to render a just grade, the state of Illinois has failed to perform the duty it has arbitrarily taken upon itself. To the farthest extent of my ability I propose to see that this work is performed as honestly and accurately as human judgment will permit. As Chief Grain Inspector I believe it to be my duty to give to the grain passing under my supervision the benefit of every reasonable doubt.

EFFECT OF THE NEW SYSTEM.

When I entered upon my duties and took charge of the inspection department I found many things that to me were very unsatisfactory. I determined to overcome these faulty conditions if possible. After much thought, careful investigation, and many conferences with the grain committee of the Chicago Board of Trade and other persons of experience, the new system of inspection now in successful operation was decided upon. Up to this time it has fulfilled my most ardent anticipations, and the more I witness its operation the better I am satisfied it is a vast improvement over the methods that had been in continuous use, without any improvements, for about forty years. I am so confident we are on the right track that I am perfectly willing, and do accept, all of the responsibility of its ultimate success or failure.

As evidence of the accuracy of the work done under the new system of inspection, I am pleased to say that where under the old method there was an average of four hundred calls for reinspection each month; there are at present only about fifty.

It has been said that I am a politician and therefore cannot be expected to be a practical grain inspector. Replying to this I state frankly that I am and for many years have been interested in politics, and in my opinion every good citizen should take an active interest in politics. Unless he does so we cannot hope for better government; and if we fail to take this interest we must not be surprised if conditions are unsatisfactory. My idea of politics is to stand for the best interests of the people, and fight everything that is to the contrary. This, however, does not interfere in any way with my judgment in the grading of grain. Whatever I do I endeavor to do with enthusiasm and to the very best of my ability, whether it be business or politics. I assure you that when performing my duties as Chief Grain Inspector politics are set entirely aside. In selecting the grain inspectors for the work in the inspection room, I have chosen those who by many years of experience have proven themselves competent. Evidence to the contrary will cause their dismissal. Correspondence on this and all other matters of interest to grain dealers is very much desired, and will always be given most respectful and careful attention.

The men who act as chief samplers are men who have had long experience in drawing samples from cars under the old system of inspection, while some of them were formerly regular grain inspectors of high standing. These men receive approximately the same salaries as those who make the grades at the office, and I consider, and I impress it upon them, that their work is fully as important (if not more so) than that of the regular inspectors and that in filling the place of samplers their standing in the work of the department is in no manner lowered from that of a regular inspector, as everything depends upon the careful and accurate manner in which the samples are taken at the cars. These samplers have assistants, or helpers, under them, but the department holds the chief samplers responsible for all the work performed.

Upon taking charge of the inspection department I at once applied myself studiously to the task of fitting myself to become a practical grain inspector. I studied hard; and I am pleased to say that if circumstances demanded, I would not hesitate to take my place at one of the tables with perfect confi-

dence that, with the training of the past four years and more, I would be able to make a record that would compare favorably with the other inspectors. I state this that you may understand that I am not groping in the dark but by hard study have fitted myself to be Chief Grain Inspector from a practical standpoint—not only in name, but in fact.

I believe the inspection department is now in a position where we can assure a just and uniform grade on grain. This being the case, grain shippers are justified in buying grain from the producers on its merits. If the grain is loaded right, I feel perfectly safe in assuring you that it will be graded right on arrival. But if shippers are careless in buying, mixing and loading, I must also assure you that no favors can be granted; you will have to abide any results of carelessness that may tend to lower the grade. The inspection department has "no foes to punish nor friends to reward." An honest, intelligent "square deal" for all is my motto and shall ever continue to be.

The postal card system instituted three years ago is still in successful and popular operation and I would urge all shippers to make use of it. The use of these cards places the grain shipper and the inspection department in closer touch which is of benefit to both. The department invites correspondence from all, as in my opinion the department belongs to the people and should in no manner be closed to the exchange of opinions. Individuals or committees are cordially invited to call at the office at any time and witness the manner of inspection, and express their individual or combined opinion as to its working. This is very much desired, and I trust it will be done before indulging in adverse criticism.

BUYING GRAIN ON ITS MERITS.

My hope is that through a uniform and accurate inspection the producers of grain may be encouraged to become more careful in garnering and caring for their crops and thus be able to deliver a higher quality, and in this way raise the standard in quality and condition of all grain passing through the great markets of the country. The farmer who cares for and delivers his grain in first-class condition should be encouraged by receiving a higher price than the one who is not so careful. It then rests with the shipper to care for and keep this better grain separate from the poorer and thus receive a better grade and consequently higher price for himself. Justice demands that the careful man should be protected as against the man who is not careful; and this, so long as I am in my present position, shall be done or I will "quit the job."

NEW METHOD OF SUPERVISING OUT-INSPECTION.

The inspection of grain out of public elevators has been the subject of much criticism, many claiming the out-inspection to be lacking in uniformity with that of grain arriving in cars. To remedy this and to insure a uniform inspection both in and out an order has been issued by which inspectors at all public elevators are required to send to my office daily by special messengers a carefully drawn sample taken from every car inspected out of the public elevators. These samples on arrival at the main office are immediately reinspected by a board of the most competent inspectors under my personal supervision; and if the grades made by the inspector at the elevators are not approved by this board, the grades are changed to agree with their decision. In this way the work of the inspectors at the elevators can be checked up and verified and a uniform in and out inspection assured, which I consider very important. In case of boatloads a similar course is pursued, except that a supervising board of three inspectors will visit each boat and supervise the work there instead of at the main office.

FEDERAL SUPERVISION OF GRAIN IN TRANSIT.

I believe in a close supervision by the Federal government of all interstate shipments of grain. (This does not mean Federal inspection.) This supervision should be so stringent that the *original grain sold*, loaded out and inspected will be delivered to the purchasers at terminal points. A law of this character is of great importance to the grain trade, as shippers and purchasers of interstate grain have no protection whatever from the

possible mixing and changing of grain while in transit.

The certificates of inspection issued by the Illinois State Grain Inspection Department are supposed to represent the grain delivered at the terminal points, although the grain passes entirely out of its control after being inspected; and in case of any mixing or changing of the grain in transit, both shipper and purchaser suffer great injustice, besides causing severe adverse criticism to rest on the work of the inspection department. Such criticism is unfair and has a tendency to lower the dignity and value of the certificates of inspection originally issued. It is to be hoped the Federal government will soon recognize the gravity of the situation and pass a law supervising interstate grain while in transit.

I believe in an absolutely honest, accurate uniform inspection of grain regardless of any and all persons or conditions.

I believe in uniform rules governing inspection at all markets which when first thoroughly tested and worked out justice can be assured to all concerned.

AMENDING THE LAW OF PUBLIC ELEVATORS.

I believe the law governing the public elevators in the warehousing of grain to be defective in some

THE PORT OF KARACHI.

India is an exporter of wheat, but hardly a consistent one, owing to the climatic uncertainties of the wheat country, which depends absolutely on the monsoon rains for its supply of moisture that is far from being the same one year with another, and the monsoon may indeed fail to do its duty to the land for several years in succession. Wheat in India began to be commercially important and that for many years but tentatively, only after the opening of the Suez canal, the most decisive event in the commercial history of the world since the discovery of America, and the subsequent development of railroads in India itself. The cereal thrives best in the plains of the Punjab (northwest) and the dry plateaus of the central provinces; but for the reason named above the annual production is too uncertain to be depended upon. At this time about 28,000,000 acres are devoted to wheat of which the United Provinces (west) and the Punjab (northwest) have about one-half, the remainder being distributed among the Central Provinces, central India and Bombay, Bengal, etc.

The wheat is harvested in our spring months. The domestic consumption is capricious, being susceptible to variations resulting from changes in the



THE PORT OF KARACHI, INDIA, DURING THE WHEAT SHIPPING SEASON.

points, and that another law more explicit in its terms should be passed whereby there can be no room for argument as to its true meaning. The present law is not as clear in its terms as it should be, leaving room for a difference of opinion as to its interpretation. A new law properly and carefully framed would remedy this and do away with the criticism that now exists. Such a law as this I have recommended in my annual report, and to secure the same it will be necessary that the state legislature take action.

I will also say that I *do not believe* the inspection of grain at *any* terminal market in *any state* should be governed and controlled by private individuals, or corporations, but should in every instance be operated under state laws. There are markets where these conditions exist, which to my way of thinking is a mistake, and not calculated to work to the best interests of the general public.

Finally allow me to again urge your hearty co-operation in the work of inspection. The department belongs to the grain trade and I am your willing representative, and by all working together harmoniously I am satisfied the inspection of grain can be made satisfactory to all.

A report of the work of the Ft. William elevators for this season to September 1, 1908, to February 23, 1909, shows receipts as follows: Wheat, 46,933,598 bushels; oats, 9,842,547 bushels barley, 1,459,312 bushels and flax 479,976 bushels.

price that may be obtained for export. The out-ports are Bombay for the Central Provinces, while the wheat from the Punjab is collected at Multan, a city with a large foreign trade, located on the Chenab River, whence it is floated down the Indus to Karachi for export.

Karachi is one of the large towns of India, having a population of about 125,000. It stands on low ground, on the bank of the Sinde, an inlet of the Indian Ocean, and although it stands on low ground, it has the only harbor on that coast with water deeper than 10 feet. Its harbor and excellent roadstead being protected by Cape Meenarah, it carries on a large foreign trade. Our illustration (from Milling, Liverpool) shows the harbor in holiday attire, it being at the height of the wheat exporting season; and the dock is crowded with steamships taking on grain and other products of the interior.

In this connection some data found in Milling of recent date, obtained from a pamphlet entitled "Wheat Elevators for India," by Frederick Noël-Paton, Director-General of Commercial Intelligence on India, may be interesting. "Wheat is a winter crop in India," says Milling. "Wheat is grown chiefly in northwestern parts of the country, it is reaped in the spring months of the year and comes on the Indian market from April onwards. The rains begin towards the end of June and inflict serious damage on wheat which is not properly protected. This damage is caused not only by direct wetting, but by the heating, or moulding, which results from great

humidity, and by weevils, which are most active in the presence of moisture. In addition to the injury wrought by these agencies, great loss is inflicted on the owners of grain stocks in India by thieves and by rats. These depredations would hardly be believed by persons who are not acquainted with India and the conditions of storage there prevailing. Similarly, the damage done by weevils is enormously greater than any customary estimate in the trade. In some recent experiments it amounted to 26 per cent of actual weight in three months, but 65 per cent of the grains were weevilled.

"For these reasons there is a strong desire on the part of shippers to get all export wheat out of the country as soon as possible. If, however, that cereal were carefully stored in elevators of approved type, there would be no occasion to ship it so quickly. The pamphlet points out that all the characteristics of the wheat traffic in North America are present in India, and that while the winter in North America is singularly severe, the onset of the rains in India is not less singular in its intensity. He further states that if the garnering of Indian wheat and seeds could be carried out under conditions which assure immunity from loss by rain, dew, weevils, rats, etc., by the building of elevators, the clamor for railway facilities would be less loud, holders could retain their produce until the worst of the rains were past, while railways could be able to earn a more constant income on their rolling stock and equipment."

DURUM FLIES HIGH.

At a time when Special Commissioner Davis, investigator of the milling industry in Europe, tells us to look out for durum,—that it cannot be expected that durum will soon have another such a season at the last, because Europe will not buy American durum,—this kind of wheat, on Saturday, March 27, advanced at Duluth to \$1.05%, the highest quotation in the history of this grade of wheat in America. The advance was on the strength of heavy foreign buying, covering a period of at least ten days. Under such conditions, it is quite impossible to tell farmers of the Northwest that seeding durum is bad policy, even in the face of Mr. Davis' report, in which after demonstrating that France, under normal conditions and for apparently good reasons, will use but little durum, he goes on, among other things, to say:

While Italy and other Mediterranean countries are users of considerable durum, it should be borne in mind that whenever possible the European supplies will be given preference over American, partly because of superior quality and partly because the consignments coming in smaller parcels are more easily handled, and are continuously coming into market when crops are fair. To increase the production of American durum beyond the ability of the Mediterranean ports to absorb, and the limited requirement of American makers of macaroni, will react quite seriously to the loss of growers, besides putting upon the world's markets a quantity of low-priced wheat which mills competing with those in America for foreign flour trade will avail themselves of in the production of their blended flours, thus disturbing values and affording to them lower cost and selling price than American mills can meet. All this will in time react against the farm price of standard varieties of wheat in the United States.

In point of quality, as desired by the Marseilles semolina makers, the American durum is considered inferior, and in practice is not preferably milled to a greater extent than 25 to 50 per cent mixture with the more favored kinds. It has had to be used to a greater extent, however, the past year on account of the partial failure elsewhere. Much dissatisfaction exists as to the American shipments of durum from gulf ports, and of late purchasers have barred such wheat in their contracts. The last crop of American durum coming from Atlantic ports was in better favor than the preceding crop, but is not liked because of irregularity in grade and the presence in it of much white and soft wheat. Buyers are not used to over 2 per cent of foreign grain and seeds in durum, but American lots come in with 6 to 7 per cent of oats and cockle in addition to softer wheat. To be in demand durum must not only be relatively clean, but it must all be hard, extremely hard, the harder the better. Many varieties of the Russian product have this characteristic of extreme hardness and maintain it year after year.

Secretary Shepard of the Buffalo Chamber of Commerce, who hitherto has furnished a statement of receipts and shipments by lake only, will hereafter undertake to supply these by rail also.

[Special Report.]

COLORADO GRAIN DEALERS' ASSOCIATION

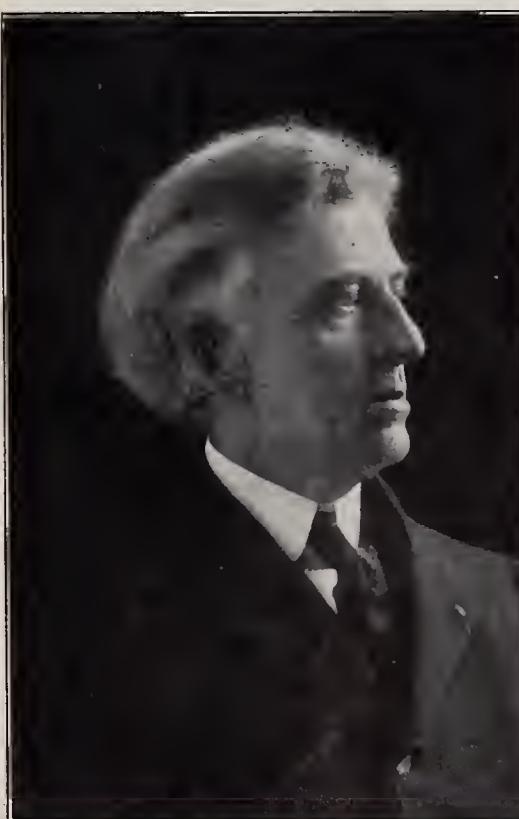
The annual meeting of the Colorado Grain Dealers' Association was held at the Colorado Traffic Club, Denver, on February 5. There were forty members of the Association present when President G. E. Ady of Denver called the meeting to order



G. E. ADY, PRESIDENT.

at 10 o'clock a. m. The following firms were represented:

Lovejoy Bros. and Farmers' Milling & Elevator Co.; Berthoud; Boulder Milling & Elevator Co.; and H. B. Smiley, Boulder; E. S. Johnston, Cheyenne, Wyo.; H. A. Robinson Grocery and Seldomridge Grain Co., Colorado Springs; Canon City Mill Co., Canon City; Ady & Crowe Mercantile Co., Ayres Mercantile Co.; J. D. Best & Co., Crescent Mill & Elevator Co., Cash Commission Co., Denver Elevator Co., Empire Fuel & Feed Co., Excelsior Mill & Elevator Co., Hungarian Mill & Elevator Co., Har-



GEO. S. CLAYTON, SECRETARY.

rington-Plummer Mercantile Co., Farmers' Mill & Elevator Co., W. F. Thompson Mercantile Co. and Westman Commission Co., Denver; Eaton Mercantile Co., Eaton; Elbert Elevator Co., Elbert; Moore & Jackson Grain Co. and Moody-Warren Commercial Co., Ft. Collins; Platte Valley Milling & Elevator Co., Ft. Morgan; Farr Produce Co., Model Milling & Elevator Co. and Farmers' Mercantile Co., Greeley; Rock Flour Mills, Golden; Johnstown Mill & Elevator Co., Johnstown; E. W. Burke, Kersey; Lucerne Produce & Elevator Co., Lucerne; W. A. Young, Leadville; Farmers' Mill & Elevator Co. and Longmont Flour Milling Co., Longmont; Big Thompson Milling & Elevator Co. and Loveland Milling & Elevator Co., Loveland; J. S. Campbell,

Monte Vista; B. Springfield, Platteville; McClelland Mercantile, Industrial & Realty Co. and P. A. Cessna, Pueblo; Jamison-Conger Grain & Produce Co., Bancroft & Marty Feed & Produce Co., Quillitch Bros. Grain Co. and Bowen Realty, L. S. & P. Co., Trinidad.

After the reading of the minutes of the previous meeting and the approval of the same, President Ady delivered his annual report as follows:

I am sorry the association has not done more during the past year, but all new movements go slow at first. I have felt that it was better to go slow than to try and go too fast.

Membership.—We now have forty-six members, and I trust during the next year we will have double that number.

Advertising.—We have had the names of all our members inserted once or more times in the leading trade papers, and I have sent lists to all the dealers in Idaho, Colorado, Nebraska, Kansas and Oklahoma. The number of letters thanking me for the lists and the inquiry for them leads me to believe that there are now hundreds of shippers who depend entirely on this list for their Colorado customers; and I believe that there is no member that has not bought during the year at least one car enough below the market to pay the cost to the association of the lists. I am sure many members have made directly or indirectly many times the cost of their membership fee.

Arbitration Committee.—We want to urge our members to use the services of the Arbitration Committee. This committee has secured the settlement of one dispute that would have required a law suit and saved for the member \$90. This committee is one of the most important, and I would recommend that the Denver association and the state association have the same committee.

Reciprocity.—We are strictly a reciprocal organization and believe in trading with those who favor us in any way. For instance, if one shipper sells to no one but the regular dealer, he always has the preference over the shipper who sends out cards promiscuously to dealers and feeders alike. All cases of shippers who deal directly with the consumer should be made known so that the association could take it up with them; and if they will not stop amicably the members of the association should be notified.

Protests.—I have added our protest to the uniform bill of lading and have opposed the McCumber bill, and have letters from our senators promising to give it their attention.

Inspection.—You have heard from your committee on weights and inspection. I want to urge that some means be decided upon to get our own weights and grades as much as possible.

Insurance.—I want to recommend that a plan be devised to operate a small insurance company. If fifty or one hundred should go together and agree to stand their share of a \$1,000 loss, in case there was no loss it would be very cheap insurance. For every loss there would be only \$10 to \$20 of an assessment on each member.

Universal Grades.—I want to recommend the adoption of the Grain Dealers' National Uniform Grades and Trade Rules, copies of which I have with me.

Railroads.—I recommend that a committee be appointed to try to have the railroads make a notation on all expense bills whether cars have been in bad order in transit, so that we won't be making claims against shippers when the loss has been in transit.

Interest.—I notice that all terminal markets that buy grain delivered are charging back interest until the grain arrives. Of course we can't do this when we buy f. o. b. shippers' track. In the latter case it devolves upon us to accept his weights, pay draft on presentation and all exchange.

Pure Food Laws.—A committee should be appointed to look after the present pure food laws. There is now a measure in the legislature to make the office a purely appointive one that will change with every administration.

The secretary being absent, there was no report from that officer.

The Legislative Committee, by T. L. Jamison, chairman, said that as nothing had come up during the year, there was no report to make.

The Inspection Committee, by C. F. Bell, chairman, reported the following:

Your committee appointed to arrange for grain inspection at Denver, begs to submit the following report:

At a meeting held at the Traffic Club in Denver on Monday, October 12, 1908, there were present T. F. Savage, C. F. Best and C. F. Bell, chairman. Mr. Forsyth of Longmont was unable to be present, and the haste with which the committee was drawn together precluded the possibility of getting adequate notice to Mr. Seldomridge. We asked then to sit with us, representing these two men absent from the committee, Geo. E. Ady, president of the Grain Dealers' Association, and Geo. S. Clayton, secretary.

After a full discussion, actively participated in by all members of the committee in session, concerning the various phases of the general subject of grain grades in Colorado, the needs and requirements of adequate inspection and the probable facilities available for meeting this need, it was determined to engage the services of a competent grain inspector to take charge of experimental work on the part of the association for a period of three months, commencing with November 15 next; and the chairman was authorized to open up correspondence with Geo. B. Powell, the chief

inspector and weigh master of the Omaha Grain Exchange, with a view to filling this position at a maximum salary of \$125 per month.

It was further determined that the above inspection should cover all grain moving in, through or out of the Denver market for the account of the members of this association, and that the uniform charge covering the inspection should be 25c per car.

A motion was made by Mr. Ady, seconded by Mr. Savage, that a committee be appointed to be known as the Grain Inspection Committee, consisting of three members, appointed by the chairman of this committee, whose supervision should compass all details of arrangement and execution necessary to provide for the association the most efficient results obtainable from this proposed inspection test. After conference and discussion the chairman appointed on this committee Geo. E. Ady, president of your association; John L. Barr, manager of the F. C. Ayres Mercantile Company, and E. H. Weckbaugh, manager of the Crescent Mill & Elevator Company; and these gentlemen have been advised of their appointment.

Your committee has furthermore communicated with Mr. Geo. B. Powell, of the Omaha Grain Exchange, and now awaits his reply.

Mr. Barr, of the sub-committee appointed October 12th by the Inspection Committee, stated that he had been unable to make any satisfactory deal for an expert grain inspector, and his committee had decided that nothing effective could be accomplished without legislation.

It was then explained to the members present what the local Association had started along these lines, and Mr. Ady's motion on weights and grades adopted by them at their meeting of February 17, was read and discussed.

Mr. Burris of Kansas was introduced and explained the Kansas method of weighing and inspection and answered questions put to him by members.

Mr. Kelly then moved that report of the committee be accepted and the committee be discharged from further duties. Carried.

Moved that a committee of three be appointed to devise a plan of inspecting and weighing cars on which there might be a dispute, and report at next meeting. Carried.

Mr. Ady then read an article from the "American Elevator Grain Trade" of February 15, on "Quoting Rates."

The meeting then adjourned to 1:30 p. m. for luncheon.

The meeting was called to order again at 1:30, and discussion followed on the article read by Mr. Ady.

Mr. Clayton moved that Mr. M. C. Harrington be appointed to draft resolutions to be sent to Representative Townsend at Washington in the name of the Colorado Grain Dealers' Association, approving his bill amending the commerce act, requiring carriers to quote rates to shippers and be held responsible for them. Carried.

The election of seven directors being in order, it was moved that the old directors be nominated and elected. It was stated, however, that Mr. Upton had gone out of business, and the motion was withdrawn.

Mr. Best then moved that the same directors, substituting Mr. Kelly for Mr. Upton, be nominated for office. Seconded.

Moved and seconded that nominations be closed. Mr. Best's motion carried, electing directors for the coming year as follows: Messrs. Ady, Savage, Clayton, Jamison, Moore, Kelly and Wright.

A recess was then taken while the new board of directors elected officers as follows: President, Geo. E. Ady; vice-president, T. F. Savage; second vice-president, H. E. Kelly; treasurer, T. L. Jamison; secretary, Geo. S. Clayton.

A discussion on rates on mixed car lots ensued, and it was moved and seconded that a committee of three be appointed to investigate mixed carloads from Kansas and Nebraska and see if something could not be done to protect Colorado dealers. Carried.

Discussion on a bill introduced in the state legislature, relating to weights and measures, followed, and a motion was made that a committee of three be appointed to draw up a protest against it and present same to legislators. The committee appointed consists of Messrs. Best, Harrington and Kelly.

President Ady informed the members that he had a pamphlet on grades, as in use by the Grain Dealers' National Association, and could procure it for all members that wish a copy, asking them to study this question and report at the next meeting their opinion as to whether these grades could be adopted by the Colorado Association.

Mr. M. C. Harrington was called upon and made a short talk. (Great applause).

The meeting then adjourned subject to call of the board of directors. Visiting members and ladies were subsequently entertained at The Orpheum.

The following standing committees have been appointed by the president:

Arbitration Committee—C. F. Best, chairman; C. F. Bell, H. A. Robinson.

Legislative Committee—M. C. Harrington, H. H. Seldomridge, W. H. Farr.

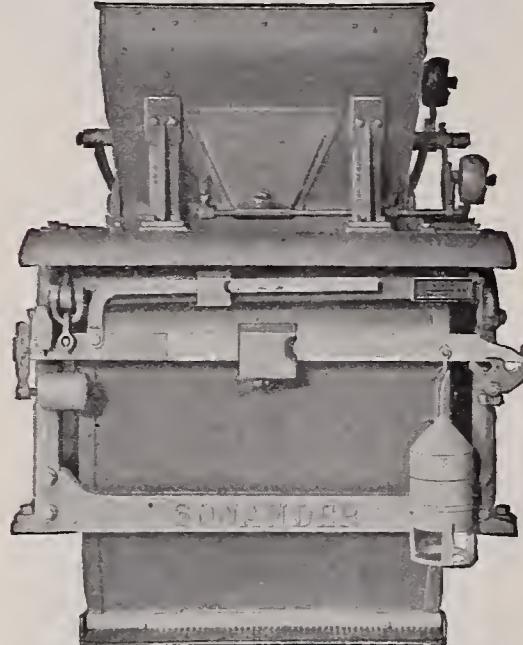
Committee to Investigate Mixed Cars from Being Shipped from Nebraska—T. L. Jamison, E. C. Wechbough, W. A. Young.

Committee on Weights and Grades—Geo. S. Clayton, G. E. Ady, J. L. Barr.

Membership Committee—M. S. Losey, M. C. Harrington, J. F. Sprangle.

THE SONANDER AUTOMATIC SCALE.

Our illustration shows the Sonander Automatic Grain Scale sold by the Power Appliance Manufacturing Company of Minneapolis, Minn. This scale in principal is similar to the common platform, or hopper scale, with the same graduated beam, sliding poise, pendant weights, balance ball,



SONANDER AUTOMATIC GRAIN SCALE.

etc. The weight-hopper is suspended from a substantial frame on knife edge bearings, and the lever arm is connected with the balancing beam, the same as in a hopper scale. All details of construction are carefully designed and executed so as to secure a standard hopper scale of the highest grade of material and construction and so sensitive as to permit a gradation to two ounces on the beam.

The cut shows two beams. The lower one is used to weigh the bulk of each load, or draft, while the upper beam is used to weigh the remainder. The beams tell the weight and the register counts the draft. By means of a simple attachment, the scale will operate continuously and automatically, or it can be operated by hand.

For the purpose of proving, any draft can be held in the weight hopper and there weighed by hand in a few seconds. It will be apparent that any residue, or amount less than full load, can be as readily and as quickly weighed.

The "Sonander" is especially adapted for bagging purposes, because the method of weighing is the same as with a platform scale. Take, for example, five bushels of oats weighed on platform scale, set to 160 pounds. The Sonander is set the same way; and the capacity of the Sonander bagger-scale is claimed to be greater than that of any other bagger. It may be operated either by hand or automatically.

The agents of the scale, the Power Appliance Manufacturing Company of Minneapolis, will be glad to furnish any farther information in regard to it, on application.

MINNESOTA GRAIN INSPECTION AS SEEN FROM NORTH DAKOTA.

There never was a more absurd tempest in a teapot than the uproar against Minnesota state grain inspection made by Mr. Macfadden and the North Dakota Bankers' Association, whose industrious distribution of misinformation relative to said system of inspection throughout the state made it possible for Senator McCumber to keep up his perennial pestering of Congress for "National inspection," and which caused the legislature of North Dakota to create by statute the Board of Grain Commissioners, whose duty it was to investigate both the inspection and weighing of North Dakota grain at Minnesota terminals, and also to inquire into the feasibility and desirability of that state erecting a terminal elevator at Duluth to handle North Dakota grain. The governor thereupon, in 1907, appointed as such commissioner A. R. Thompson (chairman), M. O. Hall (secretary), and E. D. Washburn, who during 1908 made said investigation and inquiry, reporting their findings to Gov. Burke at the opening of the biennial session of the legislature, which report has just been made public, though bearing date 1908.

The Commission seems to have made its investigations with open minds, although it is probable that Mr. Hall, at least, as an active promoter of the Farmers' Exchange of Minnesota, went into the work more or less prejudiced to the "popular," or anti-Minnesota, side. The Commission, however, frankly reports that it found the Minnesota inspection and weighing authorities wore no horns, but gave the members of the Board access everywhere and to every official record, it being apparent there was "nothing to conceal."

In making up its report the Commission takes up first the matter of the weighing of grain, the details of which the Board examined into thoroughly, and the methods of which it also details in its report, which need not be repeated here. As to one point, however, of which much misrepresentation has been circulated through the Northwest, the report says (p. 4):

Mindful of the report made by the North Dakota Bankers' Association, referred to in the preamble to the statute under which we were appointed, we were quite concerned as to the application of the so-called "suction system" and the manner in which it affected grain that was being elevated from the bottom to the top of the elevator. We have been informed that light grain and chaff were taken out of the grain by suction before it was weighed. Mr. Quist informed us that on all occasions before the state established weighing service at an elevator or mill a complete test was made by the state scale inspector, not only of the scales and spouts, but that this test also included the suction system, and no suction was permitted to be placed in the scale hopper or in any place where light grain or chaff could be drawn out before the grain was weighed.

A visit was made by our Board to elevator "C" at Minneapolis, where a test was made of the suction draft in our presence. At this elevator we discovered that the suction draft, as we found it in operation at that time, took out only fine dust, chaff, and light straw substances. There was no evidence that any grain, or even foul seeds having any particular weight, were removed by this draft. It was explained to us that the modern suction system, as employed in the large terminal houses, was absolutely necessary to collect and carry away fine and light dust, which is a menace to the health of the employees and is also a dangerous explosive, and that this suction system is required by insurance companies.

This portion of the report concludes as follows (p. 6):

We found in pursuing this investigation that an unusually large number of cars are received at terminal points in bad order—cars that are received in such condition that it is quite obvious that more or less loss has been sustained while in transit, losses that in most cases perhaps should be borne by the transportation companies, inasmuch as it is only right and proper that a transportation company should in the first instance furnish a car in good condition and deliver its contents intact to the consignee. Responsibility for discrepancies occurring while in transit should be in most cases borne by the transportation companies.

We also found that at Duluth and Minneapolis 85 per cent of all the grain was weighed on so-called "hopper scales." Furthermore, that it appears that there is a regular shrinkage of about 30 l. s. per thousand bushels, caused by hauling, as it is a well recognized fact that grain cannot be handled without a loss when elevated and weighed in hopper scales. It appears to this board that this is an injustice to the shipper; and we would recommend, as an improvement to the present system of weighing that, in perfect fairness to the shipper, all grain be

weighed on track scales before unloading instead of hopper scales.

IN THE MATTER OF THE INSPECTION.

The matter of inspection is gone into in detail—the law is cited, the grade rules are quoted, the method of collecting grain samples and their inspection in-doors, and the distinctions between the different classes of elevators are pointed out. *Apropos* the last, the Board calls attention to the difference between the public and semi-public elevator as something North Dakotans should bear in mind. The fact that the semi-public houses, which handle the bulk of the grain, are not prohibited from mixing different consignments together "is a phase of the terminal grain business that has been quite generally misunderstood by our North Dakota shippers and farmers, who seem to think that all the elevators of Minneapolis and Duluth are public houses, where the identity of the grain must be preserved as received."

The Board then takes up the "grain hospitals or mixing houses," which may well be said to be "the cause of all our woe." There are "quite a number" of these at the terminals. As the name suggests, says the Board (p. 12)—

they make a business of cleaning, scouring and mixing grain for profit. The grain that is not in a ware-houseable condition is conditioned; smutty grain is scoured; grain of inferior grade, or of no grade, is mixed with grain of better grades to insure the market grade or quality. Wheat that is too light in weight for a certain grade is mixed with heavier wheat, so that it may acquire the proper weight. Smutty wheat which in its dirty condition, would be unfit for human food is scoured or washed and brought up to a No. 2, or sometimes even a No. 1 grade. Foreign seeds and foul stuff are removed from the grain. On the whole, the grain hospital system is a business practice whereby inferior and unmarketable grain is improved and made marketable. That this process requires the mixing with the poor grain of some of the better, or perhaps even the best grain, is admitted.

It suggests itself to our Board that the modern grain hospital, under proper supervision, would serve a good public purpose, providing the profits they made were indirectly reflected back to the producer of the superior grade which they handled. These houses, together with the mills and semi-public houses, are also the beneficiaries of the sale of the immense amount of screenings or dirty grain. This brings us to that particular feature of our official duty which requires that we shall "make full inquiries into the dockage of grain and the expense of cleaning grain, and the disposition of screenings and their approximate value." Screenings, as here designated in the law, are dirt, foul stuff, and foreign seeds contained in the grain as raised and brought to market. It presents one of the lamentable features of local disputes as between the seller and buyer.

In the early days when the farmers cleaned their grain, and when, because of new and clean ground, there was little or no foreign stuff in the grain, there was no dockage. Later it became necessary; and to-day dockage is recognized as a necessary and legitimate practice, and has been officially sanctioned for years. Wheat, flax seed, and rye are now officially docked at the terminal. The last few years have shown a very large increase in dockage, as would appear from the records. Thus, in 1904 the average dockage was 21.1 ounces per bushel; in 1905 it was 18.6 ounces per bushel; in 1906 it was 27.9 per bushel; in 1907 it was 32.2 ounces per bushel, and in 1908 39.2 ounces per bushel. This latter is the record for the crop year ending Aug. 31, 1908.

The progressive increase of the dockage is due to natural causes, and is therefore a feature of growing importance. The screenings are valued at \$7 to \$15 per ton; and the Board estimates that the shippers of North Dakota sent from the 1723 elevators in that state, for the crop of 1906, no less than 57,000 tons of screenings, worth \$62,700; while at this time they are giving away no less than \$150,000 in this way annually,—which prompts the Board to the suggestion:

The North Dakota grain producer does not only give away this vast amount of screenings, but he is in addition taxed the regular amount of freight that accrues on shipments of grain in which the same is contained. It may appear impracticable, but nevertheless the waste of this immense amount of stuff, which is suitable for food purposes for stock, would suggest the idea that it should be kept at home and used by our farmers, instead of being given away and paying freight on the same besides.

For instance, the farmers' elevators, or independent elevators, or even the line elevators, might equip their houses with cleaning machinery, so that these screenings might be kept at home and probably ground into feed. Screenings, as now sold at the terminals are used principally for the feeding of sheep and for the manufacture of feed. Thousands of tons of feed are annually shipped into this state; and it would seem to be an act of wisdom to retain our own screenings right at home and use them for such purposes, instead of shipping them to Minneapolis, Duluth, and Superior, paying the freight on same and then shipping the manufac-

tured feed back into this state, which seems to be the logical, or, rather, the illogical, consequences of our system.

There is in the report a good deal of comment on chamber of commerce methods, supposititious influences of laws or regulations of some sort to affect prices and to insure to North Dakota grain growers "reasonable protection" at the terminals, all of which seems quite irrelevant when the Board reports that less than 5% of the grain received at the terminals there belongs to original shippers or farmers. The recommendation also that the state go into the terminal elevator business is equally bewildering for the same reason.

A. G. OLDS.

Few names and faces are more familiar to alfalfa millers of the country, the Southwest in particular, than those of A. G. Olds, Southwestern representative of the Williams Patent Crusher and Pulverizer Company of 2701 N. Broadway, St. Louis, whose personal headquarters are at the Manhattan Hotel, Wichita, Kansas. Before the era of the alfalfa mill, Mr. Olds for many years was a designer and builder of flooring mills, an experience that peculiarly fits him for the line of work he has been selected by the Williams Company to look after in the Southwest. Each commission he undertakes is,



A. G. OLDS.

therefore, made a special study on the ground, and his mills have proved quite satisfactory to their owners when put into operation.

Mr. Olds' territory covers the central alfalfa field, and he has already placed his principal's machines in a large number of the mills in that territory.

SWISS GRAIN MONOPOLY.

The movement for establishing a government monopoly in cereals in Switzerland has gained considerable ground since the agitation against the importation of German flour brought it so much to the front. A scheme has been elaborated by the chief of the alcohol factory for discussion by the Federal Council. It undertakes that there shall be no advance in the price of bread, although agriculture will benefit. Evidence has been collected from every interested quarter—millers and merchants, agricultural unions and consumers' associations. The present consumption of bread in Switzerland amounts to 180 kilogs. (about 39½ pounds) per head per annum. In this bread five parts of Swiss cereal is used to one of foreign grain. While this question of the state monopoly is attracting increasing attention, the agitation about the importation of German flour seems to have retired into the background.

New Orleans in March exported 51,096:00 bu. of wheat and 839,498:42 bu. of corn, the larger part of the corn and all of the wheat going to the Continent of Europe.

[For the "American Elevator and Grain Trade."]

GROWING CORN FOR EXPORT.

BY E. G. MONTGOMERY.

Chief of Department of Field Crops, The University of Nebraska Agricultural Station.

Your letter is at hand calling my attention to the editorial on "Export Corn," in the March number of the "American Elevator and Grain Trade."

I agree that the modern type of Dent grown in this country is hard to handle in a commercial way. If this corn is a better yielder than the hard flinty type of corn, I believe we would hardly be justified in changing it to accommodate the export trade, since at present we only export 3 per cent of the crop. However, since this type of corn is often difficult to handle, both in domestic as well as export trade, I believe that your suggestion, that we should give attention to developing a type of corn which will stand shipping, is a good one. In fact, the present type of "ideal ear," with its deep, starchy grains, is not necessarily a better yielder than many other shallower types; and in some ways it is unfortunate that the present standard was so generally adopted before experiments had been carried out to see whether it was the most satisfactory type for all purposes.

The principal considerations are the yield of the corn, its feeding value and keeping quality under commercial handling. I have seen considerable evidence that a shallow, ordinary-grain type will keep better; for example, it has been a common practice of many farmers in this state to pile their surplus ear corn on the ground in large pens and keep it in this way until ready to market. I have heard farmers state that the most improved types of corn will not keep when piled in this way, while some of the old, rather shallow-grain types will keep in good condition. I think this is the common experience.

The most important question, however, is which type will yield best. In a recent article published by Mr. Eugene Funk, president of the National Corn Association, he points out that with seven types of corn, which he has been experimenting with for six years, the smoother type has given the best yield five years out of six. During the past five years at the Nebraska Experiment Station we have been comparing a rather shallow-grain, smooth type with the ordinary deep-grain, rough type, and have secured an increased yield of about five bushels per acre from the smoother types. The evidence at present seems to be that we could grow a smoother and harder-grain type of corn which would yield as well if not better than the present deep-grain type advocated, and a type which would undoubtedly keep and ship much better.

I believe it would be an excellent thing if some selected consignments of different types of corn could be exported and records kept as to their ability to ship well. We certainly would not wish to advocate the development of a type of corn that would not yield well for the sake of getting something to export better; but if we can find corns that will not only yield well, but ship well also, they certainly would be preferred.

John W. Dower's report as supervisor of the department of weights of the St. Louis Merchants' Exchange reports that 734 grain cars arrived in that market in February leaking, 280 came in not sealed, and 268 with windows open.

The Inland Grain Growers' Association at its annual sack meeting at Pendleton, Ore., on March 13, accepted the bid of the Balfour-Guthrie Company to furnish 500,000 sacks for next season's crop. The price was somewhere between 6 and 6½ cents, though the exact figures of the accepted bid were not made public. The action of the Association does not bind individual members, but it is the opinion that the members will hasten to close contracts at the offer made, as it is believed the prices of sacks are more likely to advance than to decline. In the meantime, on the same day, other farmers not in the Association, contracted to buy 1,250,000 sacks from the Kerr-Gifford Co. at approximately 6½c.

[For the "American Elevator and Grain Trade."]
LOSS BY FIRE OF GRAIN IN CARS.

BY J. L. ROSENBERGER.

Member of the Cook County Bar.

Kansas City Southern Ry. Co. vs. Rosebrook-Josey Grain Co., 114 Southwestern Reporter, 436, the Court of Civil Appeals of Texas says, was an action brought by the grain company, not for the breach of a contract growing out of a failure to deliver the grain but for the recovery of a fixed sum for the loss of the grain by fire after it was delivered to and received by the carrier. It was therefore wholly immaterial what the ultimate destination of the freight was, or what was the exact consideration to be paid for the services undertaken by the railway company. It was sufficient, if it be alleged and proven that the company was a common carrier, that for a valuable consideration it undertook to transport the cars of grain and that they were delivered to and received by it for that purpose, and after such delivery while in the hands of the company, were destroyed by fire.

On the question, was the evidence of a delivery

It may be regarded as a settled principle that when goods are deposited at a place which the railway company has fixed for receiving them, or where it has expressed a willingness to receive them, and the company is notified of that fact, the delivery is complete; and this is especially true if, after such deposit has been made and notification given, the company's agents assent and agree to receive the goods at the place of deposit, and thus relieve the shipper from the performance of any other service.

PLANS FOR E. C. SUMNER'S ELEVATOR.

The accompanying plans show the elevator of E. C. Sumner at Cutmer, Ill., completed about the first of this year by the Burrell Engineering & Construction Co. of Chicago.

The elevator is 20x26 feet on the ground and 59 feet in height. A lean-to drive way, office and power house are attached to one side, as shown in the cut. The building stands on a concrete foundation and is covered with Sykes' Galvanized Iron on the roof as well as on the sides.

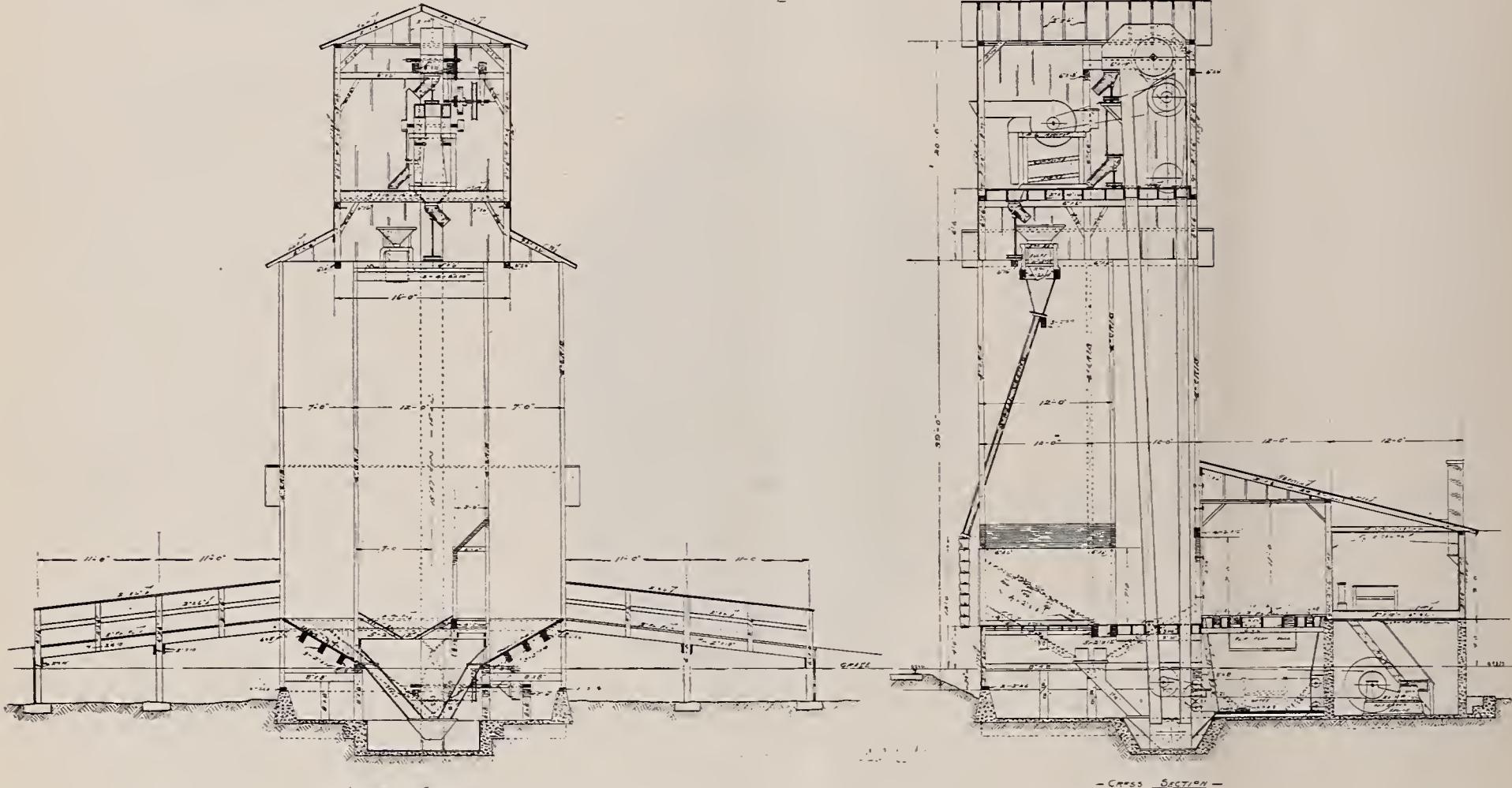
[For the "American Elevator and Grain Trade."]
THE DEEPENING OF THE MISSISSIPPI RIVER.—II.

BY L. C. BREED.

The Mississippi Valley States should raise by subscription a fund to be applied to taking steps to hasten the development of the Mississippi River for sea-going vessels.

The committee appointed as custodians of this fund should be authorized to employ a competent man whose time ought to be devoted to securing the coöperation of the business organizations of each city situated on the proposed waterway between Chicago and New Orleans, to the end that these organizations should take up with the work of securing an appropriation from their respective legislatures for the purpose given in detail in the March issue of this journal. This party should visit each of these cities in this work.

This committee should also be authorized to engage a competent engineer whose duty would be to make a thorough investigation of the physical diffi-



SECTIONAL VIEWS OF E. C. SUMNER'S ELEVATOR AT CUTMER, ILL.

and acceptance by the carrier in this instance so clearly established as to preclude the necessity of submitting the issue to the jury? the court answers: If it be conceded that the railway company was a common carrier, it must also be admitted that there was at least a constructive delivery of the two cars of freight. The railway company had begun and carried on a service of switching cars over its switch tracks to and from the transfer tracks of other lines of railroad to warehouses and places of business located along its switch tracks in the yards, and had fixed a system of charges for its compensation. It had also adopted the custom of receiving loaded cars on its switch tracks, undertaking to deliver them to the transfer tracks at other points in the railway yards. The cars in question had been loaded and sealed; everything which the shipper could do had been completed; and the agent of the railway company had been notified of that fact and directed to move the cars out. He had been notified the second time, and had expressed his readiness to receive the cars in their then condition, and had agreed to move them within a short time. The grain company had the right to rely upon these promises being carried into execution and was not required to take any further steps towards having the cars moved.

The machinery equipment consists of a 20-horse-power Fairbanks Gasoline Engine, one 4-ton Fairbanks Dump Scale, one B. S. Constant Chain Feeder, one No. 6 Monitor Cleaner, one 15,000-bushel per hour Avery Automatic Scale, and one Burrell Manlift. The transmitting machinery was furnished by the Skillin & Richards Mfg. Co. of Chicago.

Mr. Sumner, the owner of the elevator, is interested also in the 12,000-bushel steel elevator at Stockland, Ill., on the Wabash Railroad, built by the Burrell Engineering & Construction Co., about seven years ago. The town of Cutmer is located about two miles north of Stockland.

Durum wheat has followed other varieties in its flight past the dollar-mark and has already passed the record quotation of its history—a fact that will surely stimulate its greater production in the immediate future.

On March 24 \$1.23 a bushel was paid in Portland, Ore., for blue stem wheat. This was the highest point reached during the present season and so far above anything ruling in that market since pioneer days that it cannot be compared with any other year. Not only has this record value been actually paid there for a supply by a miller, but more wheat could be moved at the price if it could be secured.

culties in carrying out this project, and also furnish an estimate of the cost and probable length of time required to carry out the undertaking. It would be expected that this committee would also apply to the Secretary of War for such information as the department could furnish for the purpose of comparison.

This committee should be instructed to use its influence to secure legislation permitting the issue of bonds by the Mississippi Valley States for the purpose of deepening the river in the lieu of appropriations being made, the burden of which would devolve mainly upon people now living.

This committee should seek to encourage the present use of the river. In the past and at the present time, one of the handicaps and perhaps the principal one to the more general use of the river for freighting purposes, is the expense incurred for drayage at both ends of the route. Plans for overcoming this difficulty should be sought for and considered.

The writer will now quote U. S. Engineer Lusk's comments in his report for 1908:

"For the improvement of the river between the Ohio and the Missouri Rivers, the estimate as considered in Congress in 1883 was \$16,397,500. By the report of 1903, the cost was increased \$20,000,000 in

addition to the expenditures already made, provided the projects in force were adhered to throughout. The object of the previous and present plans and work of improvement is to obtain and maintain a minimum depth at standard low water of six feet from the mouth of the Missouri to St. Louis, and of eight feet from St. Louis to the mouth of the Ohio.

"With the present appliances and such others as are authorized for the temporary improvement of low water channels, it is expected that a navigable depth of about eight feet can be maintained between St. Louis and Cairo during all stages of river open to navigation."

This committee might also do good service by taking steps to ascertain what volume of freight could reasonably be secured by a barge line, if now in existence, and what schedule of rates could be adopted that would prove remunerative to the owners of the line and attractive to shippers. This suggestion has reference to freight moving in both directions and both bulk and package.

WHEAT IN SOUTH AUSTRALIA.

South Australia has not been considered hitherto a promising wheat country, the area available being small and the yield low; but so many unpromising acres have been giving wheat in recent years one has about ceased to be surprised at what happens. But South Australia has at least two points in its favor: it has a progressive yeomanry who use the latest machinery, and storage is inexpensive. The

000 in value, while wheat was sold on the local market at \$3.60 per bushel. Yet in 1906, this "most distressful country" produced 20,143,798 bushels of wheat, of which the exported surplus was valued at \$10,000,000, while the total exports reached nearly \$60,000,000.

BUCKET SHOPS AGAIN.

The failure of one Gus Nohe, in March, revealed (?) to the police the startling (?) fact that bucket-shopping was again (or still?) going on in Chicago; and the daily newspaper named several shops that had been doing business for some time; landlords, also surprised to learn the nature of the business of their tenants, followed suit in protesting that they knew it not, but would take notice. This from managers of some of the best office buildings in Chicago, filled with respectable tenants.

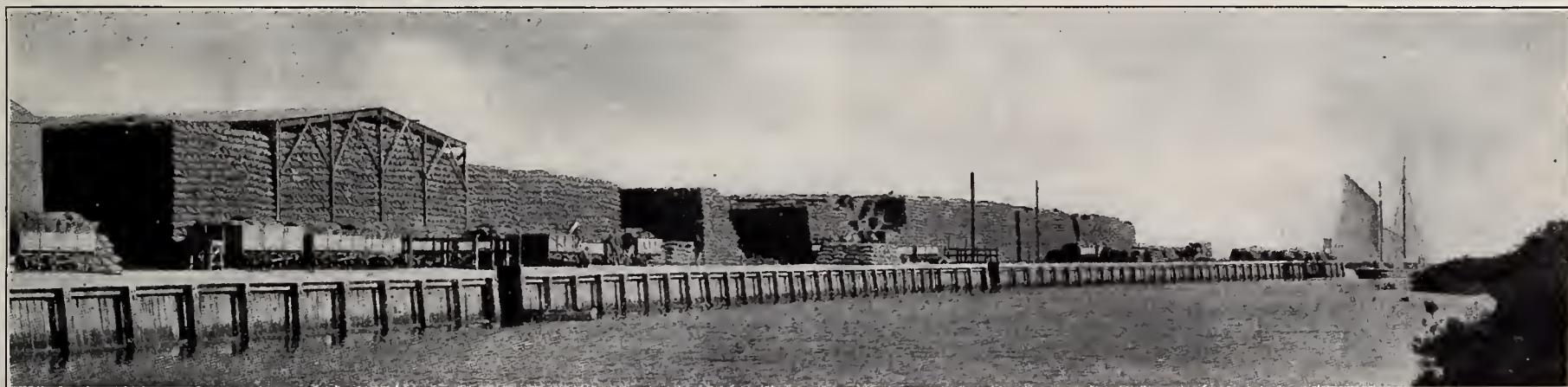
Having had his attention publicly called to the shops the Chief of Police said: "If any responsible member of the board of trade will come to me with a *prima facie* case against the bucket-shoppers I will raid them at once. I am told that the men who are alleged to be bucket-shoppers have legitimate wire connections with the Kansas City Board of Trade. If I can be shown that this is not true and that bucket-shoppers are working here, I not only will raid them, but I will see that they are kept out of the city. I may say, in addition to this, that I understand an attempt is now being made to gather evidence against these men." All of which sounds just like old times.

of a bucket shop a felony instead of a misdemeanor and provide a penalty of imprisonment in the penitentiary of not less than one year nor more than ten. The bill provides "that it shall be unlawful for any person to transmit into or in this state by means of any private wire any market quotations for the pretended buying or selling of shares of stocks or bonds, or products on margins or otherwise, when the party buying such property or offering to buy the same, or selling such property or offering to sell the same, does not intend actually to receive and pay for the same if purchased or to deliver the same if sold."

TRADING IN FUTURES.

The first campaign in Congress to secure legislation prohibitive of trading in cotton, grain and all other kinds of agricultural products for future delivery, was reopened at the opening of the special session by Representative Macon of Arkansas, who has reintroduced his bill to prohibit this speculation by forbidding telegraph and telephone companies from transmitting information concerning the buying, selling or dealing in these futures. Representative Garrett of Tennessee has introduced a bill to prohibit the use of the mails by those dealing in futures, and Representative Burleson of Texas intends to introduce a bill on the same subject. Still others who are preparing or redrafting bills to prohibit the alleged gambling are Representatives Hoflin of Alabama and Henry of Texas.

In the meantime Prof. Henry C. Emery of Yale,



ONE HUNDRED AND SIXTY THOUSAND BAGS OF WHEAT STACKED FOR EXPORT ON THE DOCK AT WAKEFIELD, SOUTH AUSTRALIA.

Illustration of 160,000 bags of wheat on the dock at Wakefield is an indication of the cheapness of storage at least, and reminds one of our own Pacific Northwest. It will be noted that the great stacks of bags are without any covering of sheds, or even of tarpaulins. So perfect is the climate during the season of harvest and shipment that cargoes run no risk in thus awaiting transport in the open air. The expense of erecting costly warehouses and stores, either at railway sidings, or wharfs, is thus avoided. Nearly all the wheat is grown within about fifty miles of the seaboard, and the freight for that distance comes to 7½c per bushel. Land for storage purposes is leased at a very low rate in the vicinity of railway stations and wharfs, and thus the cost of marketing is extraordinarily low. The situation of the wharfs is such that no elevators are required for the expeditious loading of ships, the average rate, owing to plenty of space, being about 2,000 bags per hour.

A book by the Rev. John Blacket, called "A Romantic Experiment in Colonization," gives the history of the early settlement of South Australia, and incidentally some interesting figures concerning agriculture, says Milling, Liverpool, to which we are indebted for the picture. A pessimistic colonist wrote in the Times in 1840 that "it is quite impossible to bring any European plant to perfection in South Australia. The potatoes are very bad. Corn, wheat and barley will, perhaps, do very well for the first one or two months, then the north winds, dust and insects ruin them." In 1838, on the departure of Sir John Hindmarsh, the first governor, there were 200 acres under cultivation, of which 20 only were under wheat. The total revenue of the colony was about \$7,000 and the exports \$30,-

One of the accused is the notorious shopper "Sid" McHie, whose landlord (Rookery Building) said there was no evidence to show McHie conducted a shop. Yet McHie is commonly known as the king of the bucket-shop fraternity in Chicago. Ever since he has been in this city he has been connected in one way or another with the bucket-shopping business. He has been raided by the police and indicted many times. He is said to be a millionaire several times over, and all his money has been made in this business. Others are E. A. Wirsching, Postal Telegraph Building—Indicted in September, 1899, for running a bucket-shop at 25 Sherman street; July, 1900, raided by the police; 1901, qualified as a broker of class No. 2 under the United States war tax law; May, 1901, indicted for bucket-shopping.

J. C. Caldwell, Unity Building—Qualified in 1901 as a broker of class No. 2 under the war tax act; was arrested some years ago in a raid on J. F. McChesney's alleged bucket-shop.

J. C. McChesney, Tacoma Building—Indicted in November, 1894, as a bucket-shopper.

F. J. Holzapfel, 2 Sherman street—Indicted Feb. 29, 1906, for bucket-shopping; Aug. 11, 1905, arrested in a raid on a bucket-shop in the Mallers Building.

The matter having been brought to the attention of the Chief of Police, he said that when evidence is furnished him of "irregular scales," he would "close every crooked place in town." The Board of Trade directory then took up the matter officially, while the landlord of at least one building proceeded to take measures to oust his irregular tenants.

In the legislature the scandal was exploited in the form of a bill by Rep. O'Brien to make the conduct

at the hearing by the New York Wall Street Investigating Committee, said the German government's attempt to curb stock gambling put in force in 1896 condemned as a failure. Prof. Henry told the committee that he believed, also, the prohibition of short selling in the stock market would be disastrous, and that the ability of the market to discount adverse conditions of business in advance was a necessary and beneficent part of the machinery of trade.

The Yale professor gave a detailed account of the German laws which practically prohibited the short selling of stock in the German security markets and stopped the dealing in grain and flour futures. After being in operation for a number of years the German laws were repealed after an investigation by the government committee, except in their relation to dealing in futures in wheat and other commodities. Prof. Emery was in Germany at the time the laws were passed, and made a study of the situation there. He carried his disagreement with the laws further than the government committee, and the restrictions should also have been removed from trading in wheat and other futures.

The U. S. Department of Agriculture has taken a deed to the land and will establish an experiment station for rice at Crowley, La. During the past three years experiments in the growing of rice have been conducted near Crowley under the direction of Dr. Dodson. Plans for extensive work could not then be made because of the absence of a station, but the work that has been done will be of material assistance in the plans for the development of the new station.

April 15, 1909.

COMMUNICATED

[We invite correspondence from everyone in any way interested in the grain trade on all topics connected therewith. We wish to see a general exchange of opinion on all subjects which pertain to the interest of the trade at large, or any branch of it.]

RELATIVE TO EXPORT CORN.

Editor American Elevator and Grain Trade: I am in receipt of your favor of the 23rd inst. relative to my views on "Export Corn," as referred to on page 490 of your journal.

I would say that my experience with corn has been that the small kernel corn will not get out of condition in so short a time as the large, fat kernel. Furthermore, the small kernel dries quicker and is a better corn to handle than the large kernel.

In regard to preferences for corn in Europe, Argentine corn does not even have the preference over American corn; the reverse is the fact. And it is only in rare cases that Russian corn brings a premium over American corn.

Respectfully yours, G. H. K. WHITE,
New York, N. Y. Inspector in Chief.

THE MIXING PROBLEM IN DULUTH.

Editor American Elevator and Grain Trade: In the March issue of your publication, in your editorial columns, on page 491, there is an article headed "The Mixing Problem" in which a Grand Rapids paper goes on to say that, "The thing awaviest for elevator men to explain is the statement in the North Dakota Bankers' Association report that one terminal elevator in Minnesota made within a short time a profit to the elevator of \$83,000."

That reference in one report of the North Dakota bankers, although absolutely contradicted and disproven, it seems will not down. I send you here-with copy of a communication sent to the Interstate Commerce Commission by the Duluth Board of Trade after a hearing held in Duluth at which the North Dakota bankers' report was presented and the Superior people put in their usual complaints against the grain business as it is operated in Minnesota. On page 96 of this report, you will find the answer of McCarthy Bros.' Company to the statement of the North Dakota bankers. This Company, I will say, owned the elevator which is claimed to have made this great profit. You will take notice that McCarthy Bros. Co., shortly after this immense profit is said to have been made, sold the elevator for \$20,000, or less than it was worth. You will also notice by referring to page 5, that the North Dakota bankers referred to this elevator as one of the "larger elevators." As a matter of fact, its capacity is only 50,000 bushels. That this was intentional misrepresentation cannot be denied.

Yours truly, X. X.

RESPONSIBILITY FOR RATE QUOTATIONS.

Editor American Elevator and Grain Trade: We are in receipt of your favor of the 31st, and note your inquiry relative to the hardship worked on the local shippers owing to the interpretation of the present law, whereby shippers instead of the railroad companies are held responsible for the errors in rates quoted by the local agents.

We surmise that our experience has been no exception to other shippers. We have gone up against this proposition at different times at different stations located on different roads, and we find that our experience is about the same at all points. As the interpretation of the present law stands, the shipper has absolutely no recourse to recover losses sustained by the quoting of a lower rate on grain than actually existed. It has been a problem in our mind, how a local shipper was expected to figure out the correct rate on grain, where expert tariff men's opinions will differ on the same tariff.

The Interstate Commerce Commission has men who are in charge of the tariffs that are filed with them, who are experts in their line. The writer personally knows Mr. Schindler and knows that there are few tariff men in the country superior to him.

A few days ago we had an occasion to write Mr. Baker, D. F. A. of the L. E. & W. R. R. for their tariffs on grain, car-load from Celina, Ohio, to a

number of eastern points, including Johnstown, Pa., which point we desired to ship via B. & O. At the same time we wrote Mr. Mosley, Secretary of The Interstate Commerce Commission, asking him to have his tariff men to figure out for us what the rate was on grain, car-load from Celina, Ohio, to Johnstown, Pa., via B. & O. We have in our possession Mr. Mosley's letter, stating that the tariff on file by the L. E. & W. R. R. showed the rate to be 14½c. The letter of Mr. Baker, the D. F. A., came to hand later, advising us that according to their tariff, their rate was 12c. The tariff of the L. E. & W. is the most difficult tariff to figure out that any we have had experience with.

We have the matter up with the Interstate Commerce Commission now, calling their attention to the fact of the discrepancy in the rates quoted from their office and from the division freight agent's office of the L. E. & W. We do not know what is going to be the result, but we are contending with the Interstate Commerce Commission that this tariff, as well as all other tariffs, should be made up in such a form that the most inexperienced shipper would be able to figure out the rate from one point to another. There is no reason why the railroad companies should not be held responsible for rates quoted by the local agents. That feature of the new law is a "joker," that was slipped in by the railroad companies, who are always on the ground floor, looking for their own interests, and as long as there is no united action taken by the shippers, the latter will continue to stand the blunt.

There is no reason why this question should not be agitated and the public sentiment created against this feature of the law, so that the Interstate Commerce Commission will recognize the injustice of it and demand an amendment to the law giving the relief the shipper is entitled to. We are,

Respectfully, PALMER & MILLER.
Celina, Ohio.

NORTH DAKOTA GRAIN COMMISSION ON MINNESOTA INSPECTION.

Editor American Elevator and Grain Trade: The issue of your paper, "The American Elevator and Grain Trade," under date of March 15, 1909, has been pursued by me with considerable pleasure at this time. I note, in particular your editorials and comments upon the inspection debate in our Federal Congress and your article on the report of the North Dakota Grain Commission, made to the Governor of that state, of the methods in operation in the Minnesota Grain Inspection and Weighing Departments.

I am tempted to go into the history of much of our newspaper notoriety of the past few years and the many misstatements of conditions, yet I am reminded of the fact that your paper has already published much that has helped to right those misstatements. It gives me pleasure today to mail you a marked copy of the official report of the North Dakota Grain Commission, which comes to me through the courtesy of Mr. Thompson, one of the members of that Commission. In reading this you will discover no criticism of the Minnesota departments, but on the other hand you will find dissatisfaction expressed with the methods employed in the grain business in the state of North Dakota. The report contains recommendations for changes in the law to conform in some respects to the present laws of Minnesota in relation to this subject. [Reference is made to this report in another column.—Ed.]

The Commission making this report makes a plea for Federal grain inspection; but to my mind it is made in justification of their appointment, owing to the incessant demands for Federal inspection made by the North Dakota Bankers' Association and certain politicians of that state, who have in times past raised and who now are raising this issue for campaign purposes. In support of their demands for Federal inspection they have misled the people of North Dakota by using as arguments in support of their measures the assertions that they have not received fair treatment by the Minnesota departments, and, furthermore, that they have lost money as a consequence of the methods employed by Minnesota in the handling of the grain

that comes to its terminals. This report shows conclusively the fallacy of the arguments used against our department, and brings it home to the people of North Dakota that the trouble lies within their own borders and not with the officials or official boards of the state of Minnesota.

A peculiar thing about this controversy is that no state in the Union, aside from North Dakota, has sought in any measure to criticize Minnesota methods of grain handling; and, furthermore, that the criticism from North Dakota has come from persons or associations wholly uninformed as to the actual conditions. The assailants of the Minnesota Departments have not sought to be fair in this matter, or they would not have presented arraignments of the methods in operation without first consulting with our departments and obtaining from the proper officials in charge information and data which they could use as reliable information in support of their arguments. Senator McCumber and his colleagues have never had the courtesy to visit any of the Minnesota departments nor have they written to Minnesota officials asking for information.

Supplementary to all of the various investigations of the Minnesota Inspection and Weighing Departments by the different committees and commissions from North Dakota, joint resolutions have been passed by the legislatures of both states which permits of representation by citizens of North Dakota on the two boards of Minnesota grain inspection. A request for such representation was made by the legislature of North Dakota to the legislature of our state, asking that our law be so amended as to permit the appointment of two such representatives. This communication having been referred to the Attorney-General of our state for his opinion as to the legality of the proposed amendment, the joint committee on grain and warehouse was informed by him that such an amendment would be unconstitutional. The outcome has been that the Railroad and Warehouse Commission and the Governor of this state made an offer to receive two representatives from North Dakota in a quasi-official capacity, who were to sit with the members of the Minnesota Boards but were to be remunerated by the state of North Dakota. Upon the receipt of this offer by the North Dakota legislature it immediately provided for the acceptance of the offer and the payment of all expenses necessary in connection with the appointment of the two representatives from that State.

Minnesota has through this entire controversy sought to be perfectly fair in the matter and has only wished for statements made in connection therewith that would establish the facts uncolored.

Cordially yours, F. W. EVA,
St. Paul, Minn. Chief Inspector.

LIABILITY OF CARRIERS' AGENTS.

Editor American Elevator and Grain Trade: In regard to the liability of carriers' agents in quoting rates, we would say that we have not had much trouble with the question of rates, as we aim to keep well posted; but we have had considerable trouble by the railroad company making exceptions to the Official Classification.

A short time ago we shipped two cars of ear corn to Cincinnati, Ohio, supposing the minimum was 40,000 lbs. as per Official Classification, but the railroad company charged us something like 15,000 lbs. excess weight on the two cars, referring us to a circular tariff making the minimum weight on ear corn 10% under the minimum of shelled corn, and it developed that the representative of the company at the shipping point did not know of such a ruling.

We have made claim for refund, and also taken the matter up with the Interstate Commerce Commission, but we cannot say at this time what the railroad company will do.

We understand that the railroad company advertises and publishes tariffs which become laws in effect; and we are strongly of the opinion that shippers should not be held responsible for rates and rulings published by the carriers, as there is no question but that it works a hardship on shippers, especially those in smaller towns where it is almost impossible to keep posted on all the rulings of the

railroad company; and we sincerely hope that the present interpretation of the law can be changed.

Yours truly,

THE PIERCE ELEVATOR CO.
Union City, Ind.

T. B. HORD GRAIN COMPANY.

The commodious elevator and annex shown in the accompanying picture is the Columbus house of the T. B. Hord Grain Company, one of the leading companies in Nebraska, operating from Central City as headquarters. The company's elevators are all large and well planned houses, equipped to do business, but "good lookers" for all that.

The house in question is 32x38 ft. on the ground and 109½ feet high, the annex being 32x150 feet in size and 68 feet high. There are 41 bins in all, 11 in the main house and 30 in the annex, all hoppered. In the main house are two stands of elevators. One of these, designed to take care of local business, but which may be also used for handling

[For the "American Elevator and Grain Trade."]
**THE HISTORY OF A CARLOAD OF GRAIN
AND ITS TREATMENT ON ITS ARRIVAL AT SOUTH CHICAGO.**

BY GEORGE DETRICK.

(1) When a car of grain arrives in railroad yard the yard clerk takes seal records.

(2) The car inspector examines the car and makes note of any defects. If, in his opinion, the car is unfit for grain, he marks the same "not fit for grain when empty."

(3) The contents are inspected by the state grain inspector and the grade marked on the ticket which is tacked on grain door; a sample is also taken by the receiver's agent and taken to the consignee. The car is then marked for whatever elevator it is consigned to.

(4) When the car arrives at the elevator it is examined by a deputy Board of Trade weighman, who takes the seal records and also makes note of

vision the contents of the car were weighed, and he goes over all his records carefully and makes a reply to the same at once. The complaint is also handed to the supervisor in charge, and he traces the car from the time of its arrival in Chicago, going over all railroad records and everything pertaining to the handling of same, taking note of evidence of the car having been repaired, and, in fact, anything which might lead to the recovery of shortage. The Board of Trade weighmaster does not leave a stone unturned in his efforts to try to locate the causes for the shortages.

(7) There is also working in connection with the authorities a police force known as the Grain Shippers' Protective Association, George Miller, manager. Mr. Miller has been a great help to the department, in running down thieves, who frequent the railroad yards.

Shippers should be more careful in loading the cars, to see that they are in condition to load grain in. If there is a bad-looking corner or along the sheeting, do not nail a board over it, for it will spring off and leak before it gets to its destination. Nail burlap sacking or muslin; see that there is no hole at the king-bolt, or the end over the drawbar. I have seen a stream run out of the bottom of the sheeting when the engine hits a car in switching.

After you have put in the grain door, nail burlap, muslin, cheese-cloth, or something of the kind, over the ends of the doors, for they are very apt to leak; and if the door is not of the best, put it all over the door.

Do not overload a car, for you do not gain anything. You have to pay for all there is in a car, for the weights are taken off the elevator books by the railroad agents, and if the car is in a wreck, and the grain is lost, you will get only what capacity of the car is. I saw a car of 80,000 pounds' capacity unloaded with 116,350 pounds of corn (overloaded 36,350 pounds—over 2,000 bushels). Had this car broken down the shipper would have been the loser of 36,350 pounds. I saw a car of oats unloaded with 3,500 bushels in it, also an 80,000-pound capacity (overloaded 32,000 pounds). I would say also to the shipper, do not put in old cultivator shovels, plow shears, horse shoes, etc., for the old iron dealer will give you something for them at home. The grain is not weighed in the car, but runs through a screen when it is unloaded, and the iron is all taken out before the grain is weighed.

You need not try to plug a car with bad grain on the bottom or corners and cover it up with good grain, for nine out of ten times the house foreman will find it, and then it is reinspected by the state man, and you will get "no grade" for the whole car. If they find several cars coming that way, they will trace them up and find where they come from; then they will refuse to buy that party's grain at all, but let some other elevator get bit by him. I am sure the shipper gets his correct weight of the grain that is in the car after it is in the elevator. If the car leaks before it gets here, the officials are not to blame.

The cars are unloaded by two steam shovels. They are unloaded and swept in about twenty minutes. The elevators will load a car in six minutes. The poor grain is taken into the cleaning house and cleaned. All wet grain is dried; all rusty grain is scoured. All the dust is saved and shipped, and feed is made out of it.

If the elevators were not fixed to take care of the damp, wet and low grades of grain, the farmer could not get any price for it, for they could not handle the poor grain at all. I have seen wet corn frozen in the cars so it had to be taken out with a pick. If the men running small elevators in the country, and shippers, would spend a week in an elevator in the city they could learn a good deal to their advantage in handling grain.

I would advise the shipper to send the turkeys, ducks or chickens by express to his commission man; then he will get them and acknowledge the receipt of them. He never sees your car of grain, and, in all probability, someone who opens the car to inspect the grain, or someone else, gets the tur-



T. B. HORD GRAIN COMPANY'S ELEVATOR AT COLUMBUS, NEBRASKA.

grain from any part of the house, has 6x15-in. cups while the other has 8x18-in. cups.

A large Eureka Cleaner is in use, grain from which can be dropped to either leg for elevation and distribution. A Day Dust Collector takes care of the dust, which is dropped into a dust house located 20 feet from the elevator. There is also a Morse Drier for conditioning damp and heated grain.

The 1,000-bushel hopper scale is located in the top of the main building. It is supported on independent posts resting on their own foundation, and has the beam on the working floor.

In the top of the annex is a belt conveyor with tripper, used for distributing grain into any one of the 30 bins in that building. Under the bins is a similar conveyor for dragging the grain back to either of the two elevator legs in the main house.

The sacking room is located at about the height of the top of an ordinary box car. In this room there is an Avery Sacking Scale to which grain can be dropped from either of four different bins. The floor is provided with a chute into which sacks of grain may be dropped as soon as secured to slide into the car. The scale has its register of the number of sacks filled, while at the bottom of a chute is a trip with its own registering device that records the number of sacks that go into the car.

C. D. Hart has been appointed manager of the Nye-Schneider-Fowler Elevator at Carroll, Iowa.

any defects. Or, if the car shows any evidence of having been repaired in transit, or if he finds any defects or leakages, he marks the location of the leak on the condition blank which is furnished for that purpose. It is his duty to see also that all the grain is elevated to the scale, and when the car is unloaded he examines the inside of the car to see that it is thoroughly cleaned out and that no grain is left lodged back of the lining. I have known cases where the deputy has recovered all the way from 500 to 1,500 pounds from the back of the lining in cars. When the car is unloaded the weighman is notified by signal, when contents are weighed under the supervision of the deputy Board of Trade weighman who is stationed there for that purpose.

(5) Where the shipper's weight is furnished a copy of the same is forwarded to the deputy stationed at whatever elevator the car is consigned to; if, when the car is unloaded, it is found that it is short of the shipper's weight, the deputy on the scale floor makes a thorough investigation and also notifies the deputy on the lower floor, who also investigates and makes a full report to the Board of Trade weighmaster, giving full details of the unloading, seals and defects, if any. The deputy on the scale floor also makes full report of his work.

(6) When the weighmaster receives a complaint of shortage a thorough investigation is made. A letter is written to the deputy under whose super-

key, and then you and the commission man are out.

When you put bulkheads in a car put them in well and solidly, for nine times out of ten they give way and the grain is mixed. Put them at one side of the door, and not across the middle of the car door, for the unloaders cannot get the grain out without getting it mixed. Put it in so that the car door can be taken out without disturbing the bulkhead.

OFF GRADES.

The bids which are made by elevator men who buy wheat from country stations are based both as to price and grade required upon the value and quality of grain required by domestic millers to grind into their commercial grades of flour, and by exporters to meet similar wants abroad. Since the commercial grades of flour referred to require clean and sound wheat, such grain as does not come up to this standard is bought by the grain handler or elevator proprietor at such a discount under the higher and clean grades as he figures will reimburse him for his loss in cleaning and conditioning such wheat. The same principle, of course, applies to the relations between high and low grades of grain other than wheat. The machinery in cleaning and mixing houses is prepared for the purpose of thus raising the quality of grain which would otherwise be quite useless for commercial purposes, and therefore becomes the direct means of making salable the lower grades of grain which the farmer and dealer have to sell.

SELLING GRAIN ON THE EXCHANGES.

It might be interesting to local grain handlers to more fully understand the methods of exchanges on which their grain is bought and sold and the quotations sent out which are the public advertisement of the values prevailing from time to time. The Chicago Board of Trade, for instance, maintains a set of tables on which are placed each morning paper bags containing the sample of car lots of stuff which have arrived during the last twenty-four hours and have been inspected that morning. Shippers, millers and elevator men, in fact, grain merchants of all kinds, pass around from table to table examining these samples and bidding those to whom the consignments are entrusted for sale such prices as their current needs warrant. This cash market is such a public affair that the shipper whose grain is in the hands of an honest commission man is practically sure to obtain the highest market at the time his sample is exposed, and many millions of bushels of grain are placed on same each year in this way on the floor of the Exchange.

Adjacent to the tables described above are what is known as the grain pits, in which pits brokers representing members and outside traders stand, and during exchange hours buy and sell contracts for the future delivery of the higher grades of grain which are represented upon sample tables. In this way a speculative interest in grain is created; and at times when the cash demand is unusually light, sudden and extreme declines in prices are minimized by the purchase in a large way for future delivery of these grades of grain by those who, while not having present use for the cash article, figure that they will be able to find a market for the grain which they have bought within the next few months.

An interesting example of the way this system operates to protect prices may be had by referring to the money panic in the fall of 1907, at a time when all commodities and securities dropped to low prices, owing, in part, to the scarcity of currency in circulation, such grains as are not traded in for future delivery, like, for instance, barley, declined sharply, barley, for instance, going down over 40 cents a bushel; and during the same period the grains which are traded in for future delivery in the pits declined less than 25 per cent as much.

The highest price ever paid in Pendleton, Wash., for wheat to that date was \$1.15 for bluestem on March 27. When 50c used to be considered a profitable price, no wonder Washington farmers are getting "plutocratic".

TWO PRESIDENTS.

Farquhar Robertson, president for 1909 of the Montreal Board of Trade, has been an active and useful member of that important commercial body for a number of years, and for the past few years has been made to take a leading part in the executive management. He was elected a member of the Council of the Board in January, 1906, and thereafter has been steadily advanced in the responsibilities of the direction of the Board's affairs, as



FARQUHAR ROBERTSON.

well as the honors of the Board, having been elected second vice-president in January, 1907, first vice-president in January, 1908, and President in January, 1909.

Mr. Robertson is a native of the province of Ontario, having been born in Glengarry County on April 14, 1850, and was educated at the public and grammar schools at Williamstown, Ont. In 1875 he removed to Montreal where he was engaged as man-



JOSEPH QUINTAL.

ager of a large lumber business, a connection which lasted until 1880, when he started in the coal business on his own account. He is now a director of the Montreal Transportation Co., which brings him into immediate touch with the commerce represented by the Board of Trade.

Mr. Robertson has taken a timely interest in the civic affairs of Montreal and for six years represented St. Andrew's Ward, in the Montreal City Council, with marked ability and with a splendid dedication of himself to the public service which was reflected in the benefits he was able to bring to his ward constituents and the entire city. He

was also for a like period one of the city's representatives on the Protestant School Board and for four years chairman of the council's fire and light committee.

Mr. Robertson married Flora, daughter of the late James Craig, M. P. for Glengarry County. He is a member of the St. James, Canada, Montreal Hunt and Outremont Golf Clubs, which is indicative of his high social position in the city.

Joseph Quintal, who is now serving his third term as president of the Montreal Corn Exchange, which is closely connected with the Board of Trade, was "born and bred" in Montreal and educated there. He is forty-five years of age. For more than twenty of these years he has been senior member of the firm of Quintal & Lynch in the grain and hay business, both for domestic consumption and for export, a firm that was established in 1887. The firm is one of the leading active members of the Montreal Board of Trade and Corn Exchange, Toronto Board of Trade and Winnipeg Grain Exchange.

NEW LAKE BILL PROTESTED.

The grain trade of both Winnipeg and Montreal are fighting the lake carriers' new bill of lading. Early in March the Montreal Corn Exchange filed with the Dominion Marine Association a protest but received no satisfaction; and a deputation was therefore named to go to Ottawa, in company with a similar committee from Winnipeg to take up the matter with the government. These two bodies of representatives met at Montreal on March 16 to go over the ground before proceeding to Ottawa. The first delegation consisted of John Fleming, former president, and C. M. Bell, secretary of the Winnipeg Grain Exchange and E. S. Jacques, Alex. McFee, L. A. Tilley and Norman Wight on behalf of the Montreal Corn Exchange.

The Winnipeg delegates asked also at Ottawa, in addition to the joint protest against the clause covering liability for spoilage in the new bill of lading, for an amendment to a Manitoba Grain Act to require that regular terminal elevators insure grain stored with them from losses other than by fire. At present the elevators insure from loss by fire only. This proposed provision, the grain men claim, is absolutely necessary in order to permit of the establishment at Winnipeg of a grain clearing-house, which would enable a vessel loading at Fort William or Port Arthur to load its entire cargo from one or two elevators instead of as at present, from a number, and in cases from all of the terminal elevators situated there. The change in the law, they claim, would remove the greatest cause of complaint advanced by the Dominion Marine Association against taking cargoes from these ports and holding themselves responsible for the shortages at destination.

The joint delegation was much pleased with the interview with Sir Richard Cartwright and feel that desired legislation will be forthcoming.

In the meantime the Dominion Marine Association also interviewed Sir Richard Cartwright, asking that the government should guarantee outturns at lake ports, Kingston and Montreal. It was asked that the government should appoint official weighers at the Eastern elevators, for which the vessel owners would pay a fee, as is done at Fort William.

The minister promised consideration of this request, but the vessel men do not expect that much will be done along this line.

A Kansas City elevator company on March 31 bought a small lot of velvet chaff wheat "as an experiment."

E. H. Culver, grain inspector at Toledo, has been lecturing at farmers' institutes in Ohio. At Paulding he advocated the seeding of red Chaff Mediterranean wheat, which nature protects against fly and weevil; yellow dent corn which matures in ninety days, and white oats, which command a premium for cereal purposes. He said quite a number of Illinois farmers have sold their farms and bought in Ohio at half the price and are now making the necessary improvements to make their land more valuable.

LEGISLATURES

Congress.—Senator McCumber has reintroduced in the Senate his bill for national inspection of grain.

Michigan.—[From a Special Correspondent.]—A bill introduced by Rep. Straight of Coldwater, which has passed the House and seems likely to receive the approval of the Senate, also provides that manufacturers or dealers in wheat, rye or buckwheat flours, or their compounds, shall label each barrel, box or package containing the same, to show the exact weight of the contents; and that the following standards shall prevail: A barrel must contain 196 lbs.; one-half barrel, 98 lbs.; one-quarter barrel, 49 lbs.; one-eighth barrel, 24½ lbs.; one-sixteenth barrel, 12½ lbs.; one-thirteenth barrel, 6½ lbs. The penalty for violation of the laws is a fine of \$25 to \$500, or 90 days' imprisonment in county jail, or both fine and jail sentence. B.

Minnesota.—[From a Special Correspondent.]—The Minnesota legislature, so far, has passed little legislation affecting the grain trade and killed a great deal of it. At this writing there are nine working days left and some measures of some consequence to the business are likely to pass.

The house passed the Thayer bill which provides for a stamp tax of one cent on each \$100 sale at boards of trade and chambers of commerce. The measure received considerably more than a majority when it passed, on March 26. Since then it has been in the senate committee and has not been reported out.

The house has killed the Saugstad bill, H. F. 380, which required, except for cause, boards of trade to admit all applicants for membership, prohibited them from charging more than \$5,000 for a membership, and prohibiting them from limiting their membership, and required them to admit a representative of the State Railroad and Warehouse Commission to their business meetings.

H. F. 483, by Lennon, which proposes a one-fourth mill tax per bushel on wheat and flax handled by elevators and one-eighth mill on other grain in lieu of all other taxes, has been recommended for passage by the house committee on grain and warehouses. The companion bill, H. F. 489, proposing a one-fourth cent a bushel tax on wheat in elevators on May 1 in lieu of the ad valorem tax, has been killed.

H. F. 335, by Mr. Bendixen, proposing a constitutional amendment permitting the state to establish terminal elevators, was killed by the committee.

H. F. 50, by Mr. Bendixen, which prohibits line elevators from paying a higher price at one station than another, allowing for freight and quality, was killed by the judiciary committee. The state has just such a law to regulate the oil business to protect the small companies from the big ones, and since its adoption similar laws have been proposed for almost every line of business.

S. F. 211, by Senator Thorpe, which establishes a state grain and flour testing laboratory under control of the State Agricultural School, is on the calendar in the house where it can be passed any day when the calendar is taken up. The fee is \$3 for tests except to the state grain inspectors. A bill establishing such a laboratory under the state grain inspection bureau was introduced in the house, H. F. 866, and in the senate, S. F. 596, but neither bill has made any progress.

H. F. 1042, by Mr. Gartside, is a bill to require all persons, firms, associations and corporations now engaged or that may hereafter engage in the purchase of grain for shipment from points in the state by rail, other than public warehouse and elevator men now required to take out a license and give bond to the state, to take out a license to carry on their business and give a bond to the state.

S.
The house on March 26 adopted a resolution, protesting against the lowering of the duty on barley.

A resolution extending an invitation to the North Dakota state legislature to send two grain experts to Minnesota to sit with the Minnesota Board of

Grain Appeals was adopted by the senate on March 17.

H. F. 24 recommended by the grain and warehouse committee refers to rights of owners of "special binned" grain. The bill amends the existing law to enable the owner of such grain, should he so desire, to order it mixed with other grain. As there are existing legal restrictions covering this matter, and prohibiting mixing of grain in terminal houses, it was necessary, the committee says, to modify them sufficiently to enable mixing to be done at such times as owners or consignors of grain might desire it.

A bill recommended by the Minneapolis Juvenile Court provides that any person who shall purchase wheat from a minor who has obtained it dishonestly shall be guilty of a misdemeanor, and on conviction shall be punished by a fine not exceeding \$100 or imprisonment not exceeding ninety days. The burden of proof that the minor came by the wheat honestly is placed on the purchaser and the fact that wheat is bought from a minor furnishes grounds for arrest.

Nebraska.—[From a Special Correspondent.]—Although much legislation was attempted in the Nebraska legislature which might affect directly or indirectly the grain business of the country, little finally resulted from it, and this little was considered to have been in the interests of the grain men. One exception to this statement might be made with regard to the bill which seeks to prevent line elevators from discriminating on account of competition at different points in order to meet the competition of the farmers' association elevators and make some profit from elevators which do not have that competition to meet.

In brief, five laws were passed which affect somewhat the grain trade, and one other law relating to assessment regulations is aimed directly at grain men. One of these laws is entitled, "An Act to regulate the receiving, transporting and delivering of grain by common carriers, to require them to furnish cars in good condition for the transportation thereof and to give the state Railway Commission power to enforce the provisions of the act." It provides that cars shall be in good condition for the transportation of grain when furnished the shipper, so that loss by leakage will be reduced to a minimum, and further that railroads "shall receive and transport such grain in bulk within a reasonable time and load the same, either upon its track, at its depot, or in any warehouse adjoining its track or sidetrack, without distinction or discrimination as to the manner in which such grain is offered to it for transportation as to the person, warehouse, or the place to whom or to whom it shall be consigned."

The author of the bill was a grain man who was much aggrieved at the condition in which cars were frequently furnished the shipper. To correct this evil largely he introduced the bill. In its original form it sought to provide for track scales at every station or in lieu of that to force the railroads to take the weights of the shipper as bona fide evidence of the amount of grain shipped. This evidence the bill declared should be good in court, back of which the railroad could not go in resisting payment of claims. All this was knocked out by the committees of the legislature, and in the end the author was forced to take what he could get. Another feature mentioned in the act is the discrimination against track loading such as some farmers and buyers indulge in in this state. The act requires the Railway Commission to enforce the provision that such persons shall receive cars as readily as a line elevator. Much trouble on this score existed in the state a few years ago but that has largely become a thing of the past.

A second law passed is intended to hit directly at line elevators. It was charged that these elevators, such as are owned by a corporation operating a line through a section of the state, are accustomed to put the price up wherever there is competition from farmers' co-operative associations, driving them out of business, and at the same time keep the price of grain low enough where there is no such competition that a profit on the whole investment

can be made. To correct this state of affairs, alleged to exist, the farmer memoers of the legislature put through this law. It provides that any firm, person or corporation doing business in the state who shall intentionally, for the purpose of destroying the business of a competitor in any locality, discriminate between different sections, communities or cities of the state by buying any product, commodity, or property of any kind, and paying therefor a higher rate or price in one section, community, or city than is paid for the same kind of product, commodity or property by said party in another section, community or city, after making due allowance for the difference, if any, in the grade or quality and in the actual cost of the transportation from the point where the same is purchased to the market where it is sold, or intended to be sold, shall be deemed guilty of unfair discrimination, which is hereby prohibited and declared unlawful." The act carried an emergency clause and is now in operation throughout the state.

A third law, which is wide in its operation but which affects the grain business favorably, is called "the reciprocal demurrage act." This in brief gives the shipper more time in which to load a car before demurrage is charged than he did have, making the time thirty-six hours for 60,000-pound cars or less and sixty hours for larger cars. Weather conditions may be allowed to figure in this. After the railroad receives a loaded car it must advance this shipment at the rate of fifty miles a day, twenty-four hours being allowed the carrier at division ends and where transfers from one road to another take place; or said carrier shall forfeit for all overtime at the rate of \$1 a day per car, which shall be taken out of the freight charges.

This law was asked for by grain shippers and lumber dealers. It will become effective July 1.

A companion law to this is the one which requires that common carriers must effect a settlement of claims filed with them within sixty days of the time they are filed, or ninety days if the shipment is interstate, or shall pay 7 per cent interest for all delayed time. If suit is brought to recover damages and more damages are secured than the railroad offered in settlement of the claim, said railroad shall pay the attorney's fees of the plaintiff shipper.

Indirectly the grain business was affected by the pure food law which now requires that all flour be branded with the net weight of each sack on the outside of the sack, and also allows the manufacture and sale within the state of bleached flour.

Lastly the revenue law was amended as to the way grain dealers and brokers shall have their assessed valuation determined. The present law says: "Every person, company or corporation engaged in the business of buying and selling grain for a profit, shall be held to be a grain broker and shall at the time required by this act determine under oath the average amount of capital invested in such business, exclusive of real estate or other tangible property, assessed separately, for the preceding year, and taxes shall be taxed on such average capital the same as on other property." The new law says: "Every person, company or corporation engaged in the business of buying and selling grain for profit, shall be held to be a grain broker, and shall, at the time required by this act, determine under oath the average amount of capital invested in such business for the preceding year, and taxes shall be charged upon such average capital the same as on other property. Real estate and all other tangible property shall be assessed separately. 'Tangible property' shall not apply to or include grain on hand. 'Average capital' shall include all grain purchased during the year, whether the same has been sold or is still on hand at the time of assessment." The act becomes effective next spring. B.

North Dakota.—The legislature has passed the pure seed law by Prof. Bailey, which becomes operative on July 1. The essential features of the law are that persons selling or exposing seeds for sale shall attach a label which shall show the name of the person, firm or corporation responsible for the seed and also the name of the kind of seed offered; prohibits the sale of seeds containing seeds of quack

grass, sow thistle, Canada thistle and dodder, and demands that varieties shall be reasonably true to name; establishes a seed testing laboratory at the agricultural college and provides for the inspection, testing or analysis of samples to be sent in by citizens or collected by inspectors.

It was recognized "that both farmers and seeds-men were becoming very lax as to the quality and purity of the seeds distributed for sowing purposes; the results of which are beginning to have a very depressing influence upon cropping interests. The law does not contemplate interference with seeds in transit or with cereals being sold for food, manufacture or for cleaning purposes. Uncleaned seed, if sold for sowing purposes, must be so labeled; and if a man asks for seed for sowing purposes he must not be given or shipped uncleaned seed without his consent. Steps are now being taken to properly equip a seed laboratory, and as soon as funds are available a bulletin giving the full wording of the law, together with regulations governing seed examinations and inspections will be issued and distributed upon request."

Texas.—The pure seed bill will probably not become a law at this session, being so badly drawn that such a law would be impossible of execution.

The telephone bill, in which grain men are interested, requiring companies to exchange business, was introduced at too late a date to secure attention.

Washington.—The new grain law abolishes the office of state grain inspector as an independent office and places him under the control and supervision of the state Railway Commission. It provides also for the weighing of each car of grain or hay inspected, something not required by the former law. In fixing the grain inspection fees it was the intention to increase the inspection fees, so that the extra cost of weighing could be provided for; but in its passage through the legislature this was overlooked; and so the fees in the bill stands, for inspection and weighing are 75c per car for sacked grain and \$1 for bulk grain. As sacked grain constitutes about 99 per cent of the carload shipments, the loss of the 25 cents per car will aggregate about \$6,000 per year. For inspection of grain there was appropriated by the legislature \$50,000, with the proviso that no greater sum than is collected in fees by the department shall be expended. In this respect the receipts and expenses are expected to balance.

Another provision in the law probably enables the Commission to offset any possible shortage. The provision is that in the event that a car contains several grades of grain, the Commission may charge an additional 25 cents. Most of the cars, according to the Commission, contain mixed grades of grain.

THE TEMPORARY ADMISSION OF WHEAT INTO FRANCE.

In response to the request of a reader for information, we have received the following from our Paris agent, relating to the procedure in connection with the temporary admission of wheat into France:

On its arrival at the custom house by rail, or water, the wheat is claimed by the importing miller, who pays a duty, in cash, of 7 francs (\$1.351) per 220 pounds. A few years ago credit was given, or a written guarantee instead of money, was accepted by the authorities. The payment is acknowledged by a receipt which remains in the possession of the miller.

Two months are allowed to the miller (who is obliged to convey the wheat directly to his mill) for its reexportation in the shape of manufactured products, flour, semolina, or offals. Formerly this period extended to three months, and even at the present time three months are allowed, if the wheat imported has been made into semolina for making alimentary pastes.

The manufactured products can be exported via any custom house, but in practice, on account of transport expenses, they are generally extorted through the same custom house where the wheat entered. The duty (7 frs.) is now returned, provided the quantity of the re-exported products is

equivalent to the imported wheat. An allowance of one per cent is granted for loss, impurities, etc.

The temporary admission of wheat is almost exclusively done at Marseilles, where a great number of flour millers have their quarters. Very little is done via Havre and Dunkirk, and nothing via the inland custom houses, owing to the expenses of transport.—*Liverpool Corn Trade News.*

POST GOES WRONG.

The illustration shows a common fault of grain cars—a weak or broken door post. In the case under discussion, the car arrived at Grand Crossing Elevator, Chicago, and was unloaded on February 8, 1909. The post had pushed out at the bottom, and the leak hole had been repaired with bags and boards, as shown in the picture.

The car itself, in the photograph, at least, looks old and defective; the door looks as if it had had to stand nailing a great many times, and its condition generally should have warned the shipper that great care would be necessary to prepare that car



A BAD DOORPOST.

for grain in the expectation that it would get to destination with its contents intact.

But it did arrive leaking; for whereas the car should have been well lined inside with gunny sacking to prevent the leaking that the appearance of the car should have warned the shipper would almost certainly take place; but that was not done. The loss on the grain left along the right of way would probably have paid for the lining material for many cars.

An auditor who examined the books of the Farmers' Co-operative Elevator Co. at Lake Benton, Minn., found the company to be \$12,000 in debt. Of this sum \$3,000 has been raised in cost; and the rest will be carried in one way or another so the concern may continue in business.

The free seed law, authorizing counties of N. D. to issue bonds to purchase seed to be loaned to farmers applying therefore, has alarmed many counties, owing to the unexpectedly large number of applications for the seed. In one small county the law threatened to increase the county debt no less than \$40,000 this season. In another (new) county the applications are so numerous that the residents of the old part who now have to loan them credit to the new one, object on the score that if the people of the new country feel able to set up a county government of their own, they should be competent to provide these seed necessities at their own responsibility.

[For the "American Elevator and Grain Trade."]

ST. LOUIS TRAFFIC BUREAU.

BY L. C. BREED.

In J. C. Lincoln, who holds the office of Commissioner of the Traffic Bureau of the Merchants' Exchange of St. Louis, is embodied a man who was formerly a high railroad officer and is now an officer of an organization of merchants and manufacturers. He is thus qualified to speak from a knowledge of the situation and from the viewpoint of the railroads. He is also aware of the ideas of the organization which he represents. And while he is under obligation to serve the Merchants' Exchange, he fully appreciates the position of the transportation companies and the manifold difficulties with which they have to contend. His statement is made primarily for the purpose of showing that due weight should be given to his views, which will be hereinafter presented and also to commend the wisdom of the members of the Exchange in making thorough provision for having an interest of vital importance to the prosperous conduct of their business carefully looked after and safe-guarded.

Mr. Lincoln states that as a result of the serious shrinkage in tonnage during the past year, there has been practically united action on the part of the carriers to secure an increase in rates throughout the United States; many of these changes have resulted in unsettling the balance of rates existing between various competing markets; and has resulted in the filing of more complaints before the Interstate Commerce Commission of discriminative rates and unreasonable rates than in any previous year. Many of these complaints involve the application of new principles as applied to railroad rates and have reached the court of last resort for final determination.

By reason of shrinkage in business, competition between rival commercial centers for trade has brought to light discriminative rate adjustments that heretofore have been overlooked, but which are now the subject of negotiation with carriers, and some of them have been brought before the Interstate Commerce Commission for solution.

The law holds that the only legal rate is the published tariff rate on file with the Commission at Washington. The theory of the law is to the effect that the shipper has the means of knowing and does know what is the legal rate. For many years past the methods employed by carriers in the publication of their tariffs was somewhat lax, conflicting and confusing, making it extremely difficult to arrive at the legal rate.

The Commission has issued administrative rulings requiring that carriers' tariffs shall be definite and clear and that conflict of rate schedules shall be discontinued with the purpose of so expressing rates that the legal rate may be charged in the first instance, as required by law, and overcharges and undercharges be avoided. In conformity with these regulations much confusion of rates is being corrected and the results are proving quite gratifying.

According to the Commission's report for the twelve months ending November 30, 1908, there were filed 228,490 tariff publications, containing changes in rates and rules governing transportation. While this represents publications affecting the entire traffic under the jurisdiction of the Commission one may appreciate the enormity of tariffs in a shipper's particular territory with which, under the law, he is presumed to be acquainted.

While in theory, the shipper is presumed to have knowledge of legal rates and all those tariffs containing legal rates in which he may be intrusted, in fact shippers have to depend upon the agents of carriers for information as to the legal rate. It is, therefore, of the utmost importance that quotations of carriers' agents should be in writing, that they shall be the legal rate, and that the railroad shall be held responsible therefor. The quotation of an erroneous rate through which the shipper suffers directly or indirectly, should be made a misdemeanor and some means should be provided for the protection of the shipper in the event of loss due to erroneous quotations.

Under the present interstate commerce act the

right of initiative in the making of rates, rules and regulations rests, as it should, with the carriers, and the Commission does not have jurisdiction until after rates become effective and then only upon formal complaint. Many complications growing out of restraining orders or injunctions issued by Federal courts have created on account of such cases being limited to the parties before it and the territory under the jurisdiction of the court the very discriminations prohibited by law. Provision should be made by amendment to the act giving authority to the Commission where a *prima facie* case is made, as in Federal court proceedings, in its discretion, to suspend the proposed tariff pending a hearing on the equities of the case. As the jurisdiction of the Commission extends throughout the land, the interests of all parties, both carriers and shippers, would be answered by such an amendment to the act and much harassing legislation avoided.

CONCERNING THE PRESSURES OF GRAIN.

The matter of the law of grain pressures in bins, on the walls and bottoms thereof, is a subject that has been very little understood, in spite of its immense importance from a constructional point of view; and it is doubtless due to the imperfect understanding of the laws that so many "barnbuilder" grain elevators have given way and been wrecked under the strain of overloading. Even experienced elevator designers have relied on empiric data quite largely; but fortunately their individual records and those recorded by engineering literature have made their calculations entirely safe for the client to rely upon, even in the absence of other ways of voting the accuracy of their specifications.

This problem is the subject matter of an interesting and valuable chapter of "Walls, Bins and Grain Elevators" by Milo S. Ketchum, C. E. (Engineering News Publishing Co., New York, publishers), a work to which reference has before been made in these columns. Introducing a review of the various tests, undertaken to ascertain the law in question the author says (Ch. XVII. p. 253):

The law of pressure of grain and similar materials is very different from the well known laws of fluid pressure. Dry wheat and corn come very nearly filling the definition of a granular mass assumed by Rankine in deducing his formulas for earth pressures. As stored in the bin, the grain mass is limited by the bin walls, and Rankine's retaining wall formulas are not directly applicable.

If grain is allowed to run from a spout onto a floor it will heap up until the slope reaches a certain angle, called the angle of repose of the grain, when the grain will slide down the surface of the cone. If a hole be cut in the bottom of the side of a bin, the grain will flow out until the opening is blocked up by the outflowing grain. There is no tendency for the grain to spot up as in the case of fluids. If grain be allowed to flow from an orifice it flows at a constant rate, which is independent of the head and varies as the diameter of the orifice.

Experiments by Willis Whited and of the author at the University of Illinois with wheat have shown that the flow from an orifice is independent of the head and varies as the cube of the diameter of the orifice. This phenomenon can be explained as follows: The wheat grains in the bin tend to form a dome which supports the weight above. The surface of this dome is actually the surface of rupture. When the orifice is opened the grain flows out of the space below the dome and the space is filled up by grains dropping from the top of the dome. As these grains drop others take their place in the dome. Experiments with glass bins show that the grain from the center of the bin is discharged first, this drops through the top of the dome, while the grain in the lower part of the dome discharges last. The law of grain pressures has been studied experimentally by several engineers within recent years.

A brief but comprehensive resume of the most important experiments, illustrated by diagrams, is then made, including those by Janssen, Prante, Airy, Jamieson (reprinted in these columns in 1900), Bovey, Lufft, Pleissner, and the author, taking place in Germany, England, Canada, Argentina and the U. S., are of exceptional interest to the engineer, after which the author continues (see p. 280-282):

Since the publication of Prante's experiments in 1896 there has been a wide difference of opinion among engineers on (1) the effect of the motion of grain on the lateral pressure, and (2) the effect of the size of the pressure surface on the indicated pressures.

1. Prante obtained lateral pressures four times the static pressures with wheat moving with a velocity of 1 mm. per second, and decided that with in-

creasing velocities the lateral pressures rapidly approach the full hydraulic pressure as a limit. Pleissner obtained lateral pressures twice the static pressures with wheat moving with a velocity of 1 mm. per second. Jamieson found an increase in the pressure of moving wheat of only 4 to 7 per cent. Bovey found an increase of 9.7 per cent in the Canadian Pacific Railway Grain Elevator. Lufft and the author found no appreciable increase of the pressure of moving grain over the static pressure.

In the experiments of Prante and Pleissner the bin discharge gates were not located in the center of the bins. These experiments therefore show the distorting effect of an eccentric discharge gate, as is evident from a study of Fig. 165, Fig. 166. Bovey and Lufft's experiments, and give no definite information as to the effect of moving grain on the lateral pressure. The experiments made thus far would appear to prove conclusively that with discharge gates in the center of the bottom and a discharge area not greater than 1/150 the area of the bin the increase in pressure due to moving grain will not exceed the static pressure by more than 10 per cent.

The lateral pressure during emptying is less than during filling when the grain is deep, and greater than during filling when the bin is nearly emptied.

2. Pleissner states that the grain arches over a small pressure surface, so that the results of tests with small pressure surfaces do not give absolutely correct results, although they show relative changes correctly. He drew this inference from the readings on the three rubber diaphragms used to determine lateral pressures. The variations in the pressure indicated by the rubber diaphragms were certainly due to the eccentric discharge gate. It will be seen in Fig. 184 and Fig. 185 that Pleissner's tests on grain at rest with large pressure surfaces agree very closely with the pressures calculated by Janssen's formulas. Experiments by Bovey, Jamieson and the author show that the arching action is insignificant, and that the pressures obtained with small and large pressure surfaces give a remarkably close agreement. The results obtained with model bins agree very closely with the results obtained with full sized bins.

The following conclusions may be drawn from the foregoing experiments:

1. The pressure of grain on bin walls and bottoms follows a law (which for convenience will be called the law of "semi-fluids"), which is entirely different from the law of the pressure of fluids.

2. The lateral pressure of grain on bin walls is less than the vertical pressure (0.3 to 0.6 of the vertical pressure, depending on the grain, etc.) and increases very little after a depth of 2½ to 3 times the width or diameter of the bin is reached.

3. The ratio of lateral to vertical pressures, *k*, is not a constant, but varies with different grains and bins. The value of *k* can only be determined by experiment.

4. The pressure of moving grain is very slightly greater than the pressure of grain at rest (maximum variation for ordinary conditions is probably 10 per cent).

5. Discharge gates in bins should be located at or near the center of the bin.

6. If the discharge gates are located in the sides of the bins, the lateral pressure due to moving grain is decreased near the discharge gate and is materially increased on the side opposite the gate (for common conditions this increased pressure may be two to four times the lateral pressure of grain at rest.)

7. Tie rods decrease the flow but do not materially affect the pressure.

8. The maximum lateral pressures occur immediately after filling, and are slightly greater in a bin filled rapidly than in a bin filled slowly. Maximum lateral pressures occur in deep bins during filling.

9. The calculated pressures by either Janssen's or Airy's formulas agree very closely with actual pressures.

10. The unit pressures determined on small surfaces agree very closely with unit pressures on large surfaces.

11. Grain bins designed by the fluid theory are in many cases unsafe as no provision is made for the side walls to carry the weight of the grain, and the walls are crippled.

12. Calculation of the strength of wooden bins that have been in successful operation shows that the fluid theory is untenable, while steel bins designed according to the fluid theory have failed by crippling the side plates.

STUDENT INVESTIGATORS.

Members of the freshman class in farm crops at the Iowa State College have instituted a campaign for securing first hand information which is virile. Trips have been made by members of the class to the Quaker Oats Mills at Cedar Rapids, the principle wheat mills of the state, and the malt houses and breweries at different points. In this manner they are gathering a fund of knowledge which no amount of text book study could bring to them.

A student's keenness in his work makes him eligible as a representative on these trips. He is admitted to the concern and shown the ins and outs of the business through the courtesy of its manager, who is generally in hearty support of the College. The young man has in mind details which have baffled his class in going beyond a certain progressive point. These he sifts down till he can bring back reasons why, or suggestions that may be given the

farmer through co-operative work. This investigation is helping the manufacturer, the farmer of the state, the student himself and the class which he represents.

DIRT IN GRAIN CUTS PROFITS.

"Before you ship your wheat see that every sack is clean and free from trash," said S. S. King, of the Washington state grain inspection office, in an address to the late Dry Land Convention at Pullman, Wash. "Every year Whitman County alone pays \$243,000 to exporters and railroads by not cleaning the wheat."

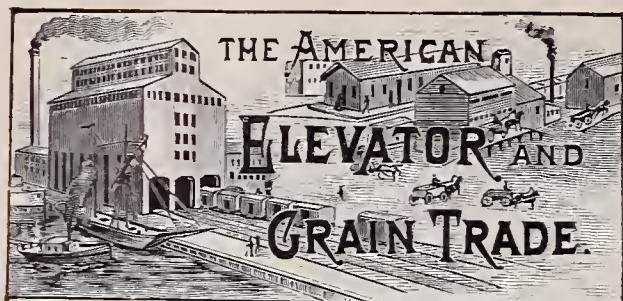
One of the principal features of the convention was the president's annual address by Mr. Young. After touching at length on the wheat crop of the past year, Mr. Young, among other things, said:

"There is a growing feeling among the producers that we are not obtaining the prices for wheat that the markets of the world justify. All through the exporting season of 1908 there has been a wide difference in prices between Portland and San Francisco, that the difference in freight rates does not explain. A prominent grain man operating in the Palouse country informed me that wheat was six cents lower than it should be in eastern Washington. Now I do not pretend to know whether there is ground for these suspicions and assertions, but it would be worth something to know as to the truth or falsity of impressions that are so almost universally believed; and I would suggest that this convention take this matter up in conjunction with the Grange and Farmers' Union and satisfy ourselves that we are not paying too much for the privileges the shippers now enjoy.

"For the last two or three years the warehouse companies, in their fight against and in their attempt to drive the independent buyers out of the field, have placed so many provisos and stipulations in their receipts that it has become a matter of so much risk that many outside buyers will not buy grain unless they are personally acquainted with the owner of the receipt. As producers we must uphold the independent dealer and see that he has a fair and square chance, and at the coming session of the Legislature there should be enacted, as an amendment to our present warehouse law, a uniform warehouse receipt without proviso, stipulation or restriction, so that the purchaser will know that he will get the exact number of bushels it calls for without paying extra packing and handling charges. The abuses of privileges that have crept of late years into the management of public utilities of this sort will ultimately lead to a law limiting the owner or operator to a storage business only."

RUSSIAN WHEAT CONTRACT.

For some time there has been but little heard of the doings of the committee appointed to look after the interests of English millers and grain merchants as against the wily shippers of Russian wheat. That the committee has not been idle, however, is evident, for we learn from a good source that a new form of contract is to be given, carrying with it more power and more chance of redress when goods are delivered otherwise than as specified thereon. Moreover, the enforcement of the new clauses is to be backed up by departmental authority, thus ensuring some respect on the part of those who have hitherto ridden over everything and defied everybody. It is rather surprising, in the days of the twentieth century of so-called civilization, to find, as we have done and are doing, in fact, men—business men—who will stoop to almost any depth in order to get the best of their fellows, and although it may not be within the province of The Miller to teach commercial morality, we feel that once now and again we are quite in order in appealing to higher instincts, no matter to what nation men may belong. Russian shippers know what the British miller wants. They also know that he expects to get what he is prepared to pay for—nay, in most cases he has paid for it beforehand, and we are hoping that at last he will obtain something like justice.—The Miller.



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ADVERTISING.

This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching persons connected with this trade. Advertising rates made known upon application.

CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

CHICAGO, APRIL 15, 1909.

Official Paper of the Illinois Grain Dealers' Association.

QUOTING RATES.

Our correspondents, Palmer & Miller, at Celina, O., in an interesting letter on page 540, show out of the experience of careful and painstaking business men, how next to impossible it is for the average shipper to ascertain what is the "lawful rate" that shippers, under the interpretation now given to the terms of the present commerce law, are bound to know. Where experts of the carriers themselves disagree as to the lawful rate, even on shipments originating on their own lines, how can shippers, who have only the bald letter of the law and the equally expressionless initial carrier's rate book before them, be expected to compute a rate covering a shipment that traverses the lines of two or more companies, more especially since there are always rules and regulations, and rulings on these rules and regulations, that do not appear on the face of the documents the shipper is referred to, but which modify or affect the rate sought to be determined?

The theory of the Commerce Commission's ruling, that the shipper as well as the carrier is bound to know the legal rate since both may be punished for accepting and giving an unlawful rate, is justified by the terms of the law; but in practice it is decidedly unfair for reasons that are obvious. Nor do we see that such dual responsibility will contribute *per se* to the prevention or discouragement of rebating, since the shipper always pays the rate that is demanded, which may or may not, according to his own calculation, be the lawful one, or the same that is demanded under only nominally different conditions of a competitor.

One may confess to a difficulty in proposing a remedy, where the field is so immense, but surely the law of principal and agent, in their relations to themselves and to the public, might,

without serious inconvenience to the legal experts who make the laws, be availed of to draft a statute which would suffice to hold the railroads themselves responsible for a rate quoted in writing by their agents.

NATURAL SHRINKAGE.

Is there a natural shrinkage of grain? Probably there is; and it may as well be conceded. There is also a natural increment, though this is less frequent. So far as the country shipper is concerned, the shrinkage and the increment alike are slight, although no positive or definite amount per car can be given as an average, for very apparent reasons.

If grain is very dry and clean it may under proper conditions absorb moisture in transit, as it will also when loaded, dry and cold, on a warm humid day in the spring, taking moisture from the air by condensation, and an increment is the result in either case; but what that will be, who can tell? If, on the other hand, grain be dusty and is loaded or unloaded on a windy day in the wind the dust will dissipate in the process and there will be a loss of weight; if the grain is damp and is handled under the same conditions, it will lose weight after leaving the loading scale and between the car and the unloading pit, though the latter be only six feet deep, and before reaching the scale at the head of the elevator; and this shrinkage of clean, dry grain of good quality has been estimated at 50 pounds per average car. There are ways to measure this loss in particular cases; but it would probably be difficult to name off-hand a loss per car that would be true under all conditions as to all individual shipments.

The shipper, indeed, has in his own hands the only remedy for natural shrinkage that is available. He should ship good, clean, dry grain, loading it through a good car loader into a sound car, or one lined with cloth or paper. Such grain being cool and dry is more apt to gain than to lose weight in transit. It will also grade better and sell on the tables at a higher price than will uncleared grain with which the shipper must take his chances as to shrinkage, grading, etc.

CARLOAD MINIMUMS.

The case of J. Rosenbaum Grain Company and the experience of the Pierce Elevator Company (see pp. 563 and 540) are different forms of the same principle; but in the former the Commerce Commission ordered reparation, while in the latter the shippers are still wondering where they "get off." In both cases the carriers exacted payment for moving grain they did not move, both basing their demands on entirely factitious conditions.

In the former case the carrier furnished a 50,000-lb. car and demanded pay for moving 60,000 lbs. of freight simply because, as it was pleaded, 81% of its cars being 60,000-lb. cars, therefore the carrier had the moral right to demand pay for 20% more tonnage than it was physically able to carry in the remaining 19% of its cars. In the Pierce case the circumlocution leading to the same demand was one of which even the agent of the carrier itself at the shipping point was not aware, the regulation causing the overcharge being one that was hid-

den from the shipper and not brought to his attention or to that of the carrier's agent at the shipping point by the tariff there on file.

Now it is desirable that the carriers should have cars of different capacities for the convenience of shippers and receivers alike, all of whom cannot be expected to adjust themselves to cars of a given size; and to compel shippers to do so would amount to a serious discrimination against the "small man" and eventually eliminate him from the game. It ought to be an easy matter for the carrier to adjust its papers or nominal minimums to the physical facts; and the public is entitled to that adjustment, even if it be true that "terminal expenses are determined by the carload and not the actual weight of the grain," as pleaded in the Rosenbaum case. The carriers cannot expect that the public's necessities shall always be made to conform to the carriers' convenience. Even private business cannot always do that, but must cater to the public's necessities and prejudices.

STANDARD OIL'S APOLOGY.

Ambrose Paré Winston of the faculty of economics of Washington University, St. Louis, has prepared an apology for the Standard Oil Company, entitled "Public Opinion and the Standard Oil Company," which the latter is freely circulating throughout the country. One must confess to a belief that in many respects the managers of the Standard's business are wise—as the Scripture saith, "Wise as serpents"; and one is not disposed to quarrel with the theory of the Standard's rectitude advanced by the apologetic professor of economics—which is far from being an exact science, by the way.

But with Prof. Winston's theory that the biggest shipper is entitled to the lowest rate, we beg to differ. Prof. Winston justifies his proposition somewhat in this way:

For example, Marshall Field's newspaper biographers told of his buying cheap by buying in large quantities, even buying the entire output of certain factories. They referred to the fact that he overshadowed all rivals in the Chicago district, and candidly commended his methods: condemning at the same time in contrast the Standard Oil men for beating their rivals by buying transportation as Field bought cloth. Evidently one sort of inequality tends to monopoly no more than the other, etc.

Without stopping to consider whether "newspaper biographers" are the wisest or most scientific of economics writers, or even up to the average tutor in intelligence, still it is only an enthusiastic and apologetic "economist" who cannot see the fallacy of this analogy. Individuals may indeed grant favors to a certain buyer in large lots, well knowing that in doing so they may endanger the commercial existence of that customer's rivals. It is "business," but the question whether it is fair is entirely apart; at any rate, it is no business of the public, which has no control over such acts. But buying transportation is different.

Transportation companies are only quasi private companies. The public has a partnership interest in their business; and because it has that partnership, transportation cannot be rightfully or equitably sold like cloth, but must be sold like postage stamps, for which Mr. Field paid in large lots or small the same price per stamp as did the man who bought but one

stamp a year; or like beer, tobacco or whisky tax stamps, which are "one price" sold "by the piece" or by wholesale.

If all men are to do business on an equality, the big with the little, which is one of the real concerns of government, freight rates must be quoted to all at the same price for the same unit of measure, like stamps, and identical service, except that there may be a cwt. rate and a carload rate; but the unit can in no case be larger than the carload without eventually crushing out the "small man" through the advantage given the "big shipper;" and because men believe that Standard Oil crushed many of its rivals in exactly that way, it must needs now marshal its apologists.

CHICAGO BOARD OF TRADE.

April 1 was the fiftieth anniversary of the chartered birth of the Chicago Board of Trade. Although the beneficiaries of the activities of this famous commercial exchange have frequently condemned the Board and all its works in unmeasured terms, notably so since the peculiarly heated days of demagogic uplifts began; it is a fact that no institution in all the world, barring none, has done so much to make the Mississippi Valley the world's great reservoir of "meat and meal" and the richest farm on earth, and to place its products in the hands of the world's consumers at a minimum of cost for handling and freight charges, as the Chicago Board of Trade. Here buyers and sellers of all the world meet and adjust prices to the exigencies of supply and demand, and in the process, so sharp is the competition of both, rarely is there any mistake made in the fairness of the prices arrived at—both those that the farmer should receive and those that the consumer should pay. And nowhere on earth, for any known commodity, is this indispensable service of bringing buyer and seller together—handling the world's food to the advantage of both—done on so slight a margin of profit. No farmer exists who would remain on the farm one hour for the profit the commission man receives for marketing his crop, however large, or indeed for all the handling profit there is in it from his farm to the bread baskets of the family table in the heart of Europe.

CAR LINER POCKETS.

Manifestly a fault of grain car designing is in the construction of the lining, as seen in the failure of car builders to produce a car in which grain will not lodge behind the lining or to provide means for making the lining pockets self-cleaning. Railroad men complain that the elevator employes or the weighmasters' deputies mutilate cars; yet it does not appear that the master car builders have seriously endeavored to build a car that shall make such mutilation unnecessary in all cases.

That grain will lodge behind the lining is of course certain, although it is not always discovered by the men who unload the cars. This is rare, however; because what escapes the authorized unloader rarely gets beyond the roving car-sweepers still found in all markets, who glean where apparently the gleanings are gone, and who will rip out a car lining with little com-

function to get at the contents of a pocket. So the records of weighing departments indicate that many of the shortages which go unexplained are caused by grain lodging in lining pockets, and an occasional overage may be attributed to the same cause.

Below are a few of the many instances recorded by the weighing department of the Chicago Board of Trade, showing grain found in the pockets formed behind linings of cars of improper construction. Suitable cleaning openings would reduce to the minimum the liability of loss of grain from this cause. For example, 100 pounds of rye were taken from an end pocket, and 90 pounds of corn taken from another pocket in the same car at the same time. Other instances of pocket finds of grain in as many different cars are:

Thirty pounds of corn, 200 of wheat, 170 of corn, 60 of corn, 225 of corn, 115 of corn, 300 of rye, 150 of barley, 145 of barley, 50 of corn, 30 of oats, 70 of oats, 170 of corn, 35 of oats, 40 of barley, 290 of barley, 450 of corn, 600 of wheat, 170 of wheat, 500 of wheat, 170 of corn, 170 of corn, 400 of wheat, 480 of wheat, 60 of wheat, 50 of wheat, and 1,200 pounds from pockets in one lot of 12 cars.

Now these finds tell their own story. Shippers might prevent a possible loss from this cause, were their grain to reach a less careful market, by lining the cars; but fundamentally this problem of car linings is up to the master car builders to devise a car that shall not have the treacherous pockets.

PUSHING CLAIMS.

Grain dealers may not be aware of it, but it is a fact, that claims for shortages, petty and serious, but chiefly petty, are multiplying in railway claim offices at an unparalleled rate. This is particularly true since certain Western roads announced that they would no longer make the traditional deduction from claims allowed of one-half of 1 per cent for "natural shrinkage." Since then the offices have been simply deluged with petty claims—the documents have swept in like shoals of herrings, thousands of them for quantities from 10 or 20 lbs. upwards.

Now, far be it from our purpose to discourage claimants from recovering from the carriers their just dues, no matter how small; but it need not be said that the immediate result of such a deluge of petty demands has been to put the carriers on the defensive, to render more difficult the collection of all claims by the inordinate multiplication of the merely physical difficulties of giving individual claims any attention whatever, and to throw a certain suspicion on the fairness and reasonableness of the claims themselves. Furthermore, as these claims in many cases are based on weighmasters' reports of cars arriving in leaking condition, the railroads very naturally are beginning to give less and less credit to those reports.

And, indeed, why not? At Chicago, as it appears, the weighing department has never found to exceed 21 per cent of the grain-laden cars justifying a report of leaky condition; and in 1908 there were less than 15 per cent so reported; whereas, while in one other market only 10 per cent were so reported, in at least seven others the percentage reported ran as high as 36, 45, 50, 54, 62, 65 and even 72 per cent. It is not our province to question the accuracy of these reports; but it surely must

be realized by dealers that this amazing increase in the volume of small claims based on such reports of leakage must so increase also the work of adjustment that the rendering of justice may become physically impossible within the ordinary period of a business firm's existence.

Let it be added here that the successful claimant is the man who makes a reasonable claim, never for less than a hundred pounds of grain, and whose documents are unassailable in form and temper; who realizes that petty losses are practically impossible of prevention by himself or the carrier and of verification; and who expects to absorb always a certain percentage of loss in handling as do all business men, and who adjusts his business accordingly. Such a claimant rarely finds it necessary to do more than to present his claims. His reputation is good and his claims are adjusted as a matter of course, while a thousand others clamoring for 10-lb. and 50-lb. items may haunt claim offices like the heirs of Jarndyce the chancery court. In fact, we believe the day is at hand when any claim under a hundred pounds will be ignored completely.

DEEPENING THE MISSISSIPPI.

There has lately been sent to Washington a report of engineers on the practicability of maintaining a 14-ft. channel in the Mississippi River between St. Louis and New Orleans. What that report is will not be known until it shall have been examined by the chief engineer; then it may be published. Announcements of the purport of the document have been made, *pro* and *con* the depth named, but such publications are but guesses.

It is remembered, however, that a similar report was made some years ago which declared that a 14-ft. channel was impracticable; its maintenance, without canals parallel to certain reaches of the Mississippi River would be too costly in proportion to the commerce that might resort to the river to warrant the annual expenditure that would be required.

The clamor, then, at Springfield, for legislation in behalf of not merely a 14-ft. but a 25-ft. channel in Illinois River, as a part of a continuous 14-ft. or 25-ft. channel to New Orleans, seems open to decided criticism; and at least until the above mentioned report shall be published, such clamor may be treated with suspicion as a proposition that needs close watching.

Indeed, the "American Elevator and Grain Trade" is of the belief that any money spent to deepen the Illinois and Mississippi Rivers beyond eight to ten feet is a probable waste of money. In Europe, as John L. Matthews reports, after a careful investigation in 1908, river traffic in enormous volume is carried on over shallow depths—some rivers carrying a heavy volume of traffic in two feet of water; while the money our Illinois River canal promoters propose to put into useless depths is there expended on docks, wharves and the labor-saving machinery for loading and unloading freight, like that used at our lake ports, but for which our Mississippi and Ohio River boatmen would have to rely upon negroes and white white roustabouts, the most expensive of all labor for that purpose.

EDITORIAL MENTION

When you buy a scale buy one from a reputable scale maker, not from a catalogue of superannuated bargains.

The decision of the National Association arbitration committee, printed on another page, is worth reading, if only to see how easy it is to waive one's rights by a simple process of neglect.

What can be done with a claim that the carrier has had in its possession for two years and now refuses both to audit and to return the papers, besides sending to a lawyer? A shipper would like a hint.

The corn shows at Omaha and Des Moines in December, 1909, conflict somewhat as to dates, a fact that may suggest the absence of that *entente cordiale* which ought to exist between the two institutions.

Louisiana, like Georgia and Alabama, will "go after" all mixtures of barley and oats and the like, unless such mixtures are properly tagged. If the Northern states should follow the same lead, perhaps the "uniform inspection" rules would come into their own a little faster than they seem to be doing.

The "Galveston Plan" of selling cotton and grain by farmers, of which something has been said by the press of the Southwest, is merely an agreement by the Texas State Flour Mills, operating large export elevators at Galveston, to accept consignments of wheat from the Farmers' Union and advance the shippers when desired 80 per cent of the value of the grain.

Inspector Cowen's article on Illinois grain inspection is a timely statement of what is going on at Chicago, and we believe it is a true statement. If now other departments will be equally rigid with their out-inspection, we are inclined to think that future complaints of inspection, that are founded on fact, will become fewer and fewer, and will in time entirely disappear.

Down in Egypt the "Equity" masses are thronging the "dollar wheat" rallies; but, unlike Mr. Leiter in 1898, Mr. Patten is not the great benefactor of the farmer by his great bull act. That capacity is claimed by some measly Equity organizer who claims to have brought dollar wheat into the realm of fact. So much for the new "uplifters" since Joseph L.'s time.

Brazil is again about to find out if her people can raise wheat, and has offered to certain syndicates which plant about 500 acres under expert direction an annual bounty of \$4,500 for five years. The same amount will be paid for the maintenance of a mill. Well, of course, if Brazil undertakes to encourage the growing of exotics in this way, we at least ought not to complain, seeing that we do the same thing in other ways; but why Brazil should pay \$4,500 annually to "demonstrate a mill" when Rio Janeiro has been possessed of a very profitable mill for a number of years, doesn't quite appear

to people who have not yet risen to the folly of direct bounties.

Our reports of legislative action in leading states have, we think, been a valuable feature of the past few issues of the paper. Our correspondents are now giving us the résumé of what was done. This came from South Dakota last month and our Lincoln correspondent this month tells what has happened in Nebraska. The damages in either case are slight. From Minnesota a summary will be due next month.

One correspondent, Mr. Breed of St. Louis, has ideas on the practical way of securing the deepening of the Mississippi River for commerce; but one has a suspicion that his project of asking other states to follow Illinois in "chipping in" for this work will appeal but faintly to peoples who have come to expect the Federal government to do everything. At least one can but commend so exceptionally sensible a proposition of self-help.

Down in central Illinois a regular company operating a string of houses gives notice by handbills in their territory that they "will pay the landlord or tenant, not a stockholder in the Farmers' Grain and Elevator Company, the full market price for all grain delivered at a certain elevator, and three cents a bushel premium besides. This offer is made to farmers in the territory tributary to this certain house and is good 'until further notice.'" Respectfully submitted for criticism.

Rep. Adkins, who voices the farmers' elevator interests in the Illinois legislature, has introduced a bill to prohibit the purchase of milk, cream, poultry, eggs, or grain in one community for a higher price than paid for it in another for the purpose of creating a monopoly, or ruining a competitor. Mr. Adkins picked up this brilliant idea in North Dakota and of course, as a promoter of exploded fallacies, he must encumber the statute books of Illinois with similar useless lumber.

The Canadian shippers are much worried over the attitude of the Dominion Marine Association to the loss clause of the bill of lading, and appeal to the government to in some way force the carriers to stand the heavy shrinkage between Canadian head-of-the-lakes and Buffalo. The Chauvinist Press of Canada says: "We cannot refrain from quoting a remark made by one of the astute men in the grain trade, namely: 'For Heaven's sake let us settle the matter before the Americans act, and leave us nothing to ship.'"

There never was a more complete collapse of any complaint than that behind the North Dakota Bankers' Association's attack on Minnesota state inspection; and the report of the Board of Grain Commissioners referred to by Grain Inspector Eva and by us on p. 536 shows how absolutely foundationless and silly was the uproar made by that body. The farmers of North Dakota have only to clean their grain and to stop shipping screenings, and all their inspection woes will cease automatically. Even the unfriendly Commission was forced to admit this, and with commendable frankness did so. Naturally the Commission indorses "National

inspection," but in doing so virtually traverses its own previous findings, so that that portion of the report contradicts itself.

The great naval conference at London, which completed its work on March 20, formulated an agreement as to contraband commodities in case of war, among which we find foodstuffs only when consigned directly to military forces. The onus of proof lies with the captor. The conference agreement was notable in one respect, to wit, that England, in spite of her hereditary objections thereto, consented to a list of "absolutely free" articles much more extensive than she has hitherto consented to recognize.

The Iowa oat trains of February and March were as successful in obtaining interested listeners to their lectures as any of the famous "corn specials." The curious thing about it all is the fact itself: Wallace's Farmer puts it in this way:

The philosophy of this effective means of education is quite interesting. There has probably not been a single statement or preaching by any of the speakers on these trains that has not been stated and preached over and over again for years past by Wallace's Farmer and other up-to-date agricultural papers. Nevertheless the average farmer is not so apt to carry on the teachings in the paper as he is to try to follow the teachings he hears on the good roads, corn, oats or dairy special, even if the same individuals do the teaching from the car as through the paper. Curious, isn't it? Yet it is true.

It is true, as Mr. Kress said in one of his recent weekly talks to his patrons, that, "The prices that our farmers are getting to-day for stuff are two and three times as high as they were ten years ago, while the country shipper's margin of profit, as well as risk, remains just the same. This is not fair." Of course it isn't; but it's a fact just the same and because the dealer has become settled in the habit of selling "3 or better"; and as long as he does that he never can get away from a narrow and fixed margin of profit, which is always as low as the small minority of his fellow dealers will be content with. When country dealers do break away from the "3 or better" habit and again consign their stuff, they may begin to think of getting a margin of profit that is in some proportion to the greater amount of capital it now requires to do business on a permanently higher price level.

The Kansas City market was rather badly hit by the I. C. C. decision in the rate adjustment case mentioned elsewhere. The principle enunciated by the Commission is in some respects new. Certain markets have in the past been favored with rates that forced grain as well as other commodities of trade through their doors, and it is hard for these now to see that privilege disturbed or withdrawn. But surely it is not improper that as new routes are established and new avenues of trade opened, which involve substantial reductions of handling charges of all kinds, those new routes should be permitted to fulfill their commercial destiny. If Kansas City is threatened on the one hand by the lake-and-rail routes and on the other by the short lines to the Gulf from western Kansas, it is up to her to do what has so often been talked of by her people, to wit, "set up water competition on the Missouri River," and not try to compel the people of the western part of

the state to lose the advantages their enterprise has won for themselves.

The era of the wooden elevator is drawing to its close, not because the U. S. is yet ready to require fireproof construction, as may one day be the case, and at a day not far distant, but because the cost of lumber will soon make such building too expensive. One may ask if it is not already so in the older parts of the country, when the cost of insurance, the encroaching fire ordinances and the increasing cost of repairs are added to the first cost, and which could be avoided by the use of brick, tile or concrete. When one is building for the future as well as for to-day, it may well be a question whether even at a slightly lower cost now the wooden house might not profitably be abandoned.

While the grain men of the Northwest protest against the lowering of the barley duty by 50 per cent, the maltsters of the East would have Congress go farther and cut it out entirely. The East claims that barley is "raw material," which should be free of duty; but to the farmer it is a finished product; and there we are. It is certain that since the McKinley bill began the barley duty, the importation of barley has practically stopped, and malting to a certain degree has ceased to exist in the East. The latter fact, however, may be simply *post hoc* not *propter hoc*, since the barley fields in the United States, as in Canada also, have moved westward from natural causes; and so of course has the malting industry.

Prof. Henry C. Emery, political economist of Yale University, as a witness before the New York Wall Street Investigating Committee, recently retold the history of the anti-futures laws of Germany, which proved so disastrous alike to dealers in and consumers of grain. He held, however, that the agrarians (farmers) did not ask for the repeal or modification of those laws, which is quite likely. The average farmer is not a student of commercial phenomena, and so accepts surface indications only, however much they may in fact injure or benefit himself in an unseen way; and it is always the demagog's privilege to misrepresent, or at least to misstate, causes and effects. One, therefore, has little fault to find with the farmer's misunderstanding, but looks for better things from legislators.

The idle car total on March 29 was reduced from the previous week by nearly 8400; but in the week following it again increased slightly. There are, however, now fewer idle cars than in any previous report this year, but more than in any report between July 22, 1908, and the end of December. The slow movement of grain undoubtedly has its influence on the car situation. Although the car record does not, then, readily reflect or respond to the industrial situation in its entirety, there is an increasing immigrant movement which is thought to be a better index of the business future. It is true this movement is a little puzzling in view of conditions in the manufacturing trade, but an Eastern contemporary says: "It probably is a sequel to three things—the abnormally large emigration of laborers a year ago, the unfavorable condi-

tion of foreign industry, and the demand for labor on our farms and in the building enterprises of certain sections of the country."

The committee on demurrage of the Interstate Commerce Commission and representatives of the railroads and shippers in session at Washington early in the month reached no definite conclusions, so that it will be necessary for the committee again to meet to thresh out matters yet in controversy. It is expected that when the conclusions finally are reached they will be acceptable alike to the railroads and the shippers. So, at least, the Washington reporters say. But they used to say that of the uniform bill of lading also.

Prof. Gardner of the Pennsylvania State Agricultural College in the course of a "seed-train" lecture in that state demonstrated that in the last forty years the relative value of corn has increased, while the value of oats has decreased and wheat has remained stationary. This fact must be attributed, of course, to the wider usefulness of corn; and the fact justifies his urging farmers to grow larger crops of corn. Yet, as we contemplate the rapid increase in our population, we need hardly go so far as to advocate such efforts in distinction from the culture of oats and wheat, because the prices of these can hardly decline below a very profitable level, probably not below that of a good crop of corn, the expense of growing and harvesting which is greater than for oats or wheat.

Seed men have been endeavoring to convince Congressmen and customs appraisers that it is possible for one to be a seed man, even an importing seed man, and yet be honest, by intention at least. And so they have asked the makers of the new tariff to substitute specific for ad valorem duties on seeds. They are quite tired of being told, every time they make an advantageous contract abroad with a gardener, or seed grower, that they are dishonestly undervaluing such seeds because the prices named in their invoice as cost value abroad do not correspond with current market values; yet that is the charge appraisers not only make but arbitrarily enforce. Ad valorem duties are always the most vexatious a government can levy, but that on seeds is beyond all comparison the most aggravating in the whole tariff category.

Our contributors, Messrs. Rutherford and Bowie, do not seemingly agree in all detail as to American corn; but what of that? Both look at the matter from different standpoints and no doubt each is right. But Mr. Bowie tells a story that should impress the Western farmer with its truth. The surplus of his farm, which Mr. Rutherford tells us is all he ships, should be of a quality fit to mill, and as a miller Mr. Bowie is in a position to know that it is not, and he tells us why it is not. If we will but remember the crops of 1906 and 1907 we will recall the fact that a very large part of them was handled only with the greatest difficulty and for the same reason. We have the profoundest regard for the American farmer. God bless him, but that need not prevent our saying with respect that he still has a "heap" to learn and more than a heap of good practices he knows are good to put into practice.

BARLEY and MALT

The George J. Meyers Malting Co. of Buffalo, N. Y., is planning to erect a new malthouse in that city at a cost of \$100,000.

The largest sale of barley so far this season in Washington was recorded recently when the Kerr-Gifford Co. of Walla Walla purchased 126 tons of L. W. Cantonwine at \$27.50 per ton.

A resolution protesting against the reduction of the import duty on barley from 30 cents to 15 cents per bushel has been passed by the directors of the Minneapolis Chamber of Commerce. Other exchanges are planning similar resolutions.

The Davenport Malt and Grain Co. of Davenport, Iowa, plaintiff in a suit at Louisville, Ky., against Hettinger & Huck, proprietors of the Union Brewery in that city, has been awarded the verdict. An account of the case will be found in another column.

The Western Elevator Co. of Winona, Minn., is preparing to introduce some very choice barley for seeding purposes at actual cost. The seed will be distributed through the company's various elevators in southeastern and southern Minnesota, where the barley crop, within the last few years, has deteriorated very markedly. The Western Elevator Co. has inaugurated this plan largely at the instigation of the Anheuser-Busch Brewing Association of St. Louis, which is planning to offer inducements in the way of premiums for the finest barley shown at local, county and state fairs.

THE BARLEY DUTY.

The Minneapolis Chamber of Commerce has adopted a resolution protesting against the reduction of the duty on barley from 30c to 15c. The resolution is as follows:

Whereas, The Payne tariff bill, as drawn, reduces the import duty on barley from 30 cents per bushel to 15 cents; and

Whereas, The states of Minnesota, North Dakota and South Dakota, Wisconsin and Iowa produce nearly all the barley grown east of the Rocky mountains, large quantities of which are used in the eastern parts of the United States; and

Whereas, The producers of eastern Canada are able to raise an excellent quality of barley on cheaper lands and from cheaper labor and much nearer our large eastern cities than barley grown in our Northwestern states; and

Whereas, It has developed that the large Eastern users of malt asked the ways and means committee of Congress to place barley on the free list and are now working to that end; be it

Resolved, That any reduction of the duty on imported barley is against the interests of all growers of barley in all of our Northwest states.

The agreement against reduction is fully stated by the Minneapolis Market Record of March 29, which said:

The action of the Minneapolis Chamber of Commerce in opposing the proposed reduction in the tariff on the barley from 30 cents to 15 cents and the opposition of the members of the Chicago Board of Trade interested in the barley trade is to be commended. The present tariff bill seems to be framed entirely in the interests of the Eastern manufacturer as against the interests of the West both as producers and manufacturers.

It is the contention of the Western barley and malt traders and growers, and we believe the point is well made, that the proposed reduction will play into the hands of the East to the detriment of the Western trade and especially the Northwest. In the four states which center about Minneapolis and which make this city the center of the barley marketing and is to eventually make it the chief center of a large malting industry, the bulk of the barley production of the United States is raised. Any subtle plan on the part of the Eastern trade to check the development of this region most certainly gives the farmer a cold deal.

Canadian barley in the province of Ontario is placed in a strategic position to compete with Northwestern barley to the detriment of the Western grower by virtue of its nearness to the Eastern market and the favorable transportation rates. It has never been quite logical, as to the advantage the farmer has derived from the duty on wheat, for that is a different proposition, but there is no doubt as to the benefit of the tariff on barley. In spite of constant opposition the local barley market has grown to enormous proportions and has interested large capital in the development of the malting industry. After several years of constant application favorable railroad rates have been obtained for malt and it is proposed at one blow to undo the slow work of years.

It is only through organized protest that the change in the tariff may be stopped. The movement of the local exchange is but the beginning. We hope to see the great producing section of the country make it plain to their representatives in Congress that they may be given something more than a hollow interest in the new tariff bill.

Fred Shelby, manager of the Baldwin Elevator at Sadorus, Ill., met with a painful accident recently, breaking three bones in his foot. He will be laid up for some time.

TRADE NOTES

The Stephens-Adamson Manufacturing Co., Aurora, Ill., have received an order for grain handling machinery for a plant at Victoria, B. C.

S. F. Evans, of Moulton & Evans, Minneapolis, was in Detroit recently, where he read a paper before the Engineering Society on "Modern Methods of Construction of Grain Elevators."

The business of the Grain Dealers' Supply Co., 305 and 317 South Third St., Minneapolis, Minn., has been purchased by J. F. Younglove of Sioux City, Iowa, and will be continued under the old style at the same location.

The National Automatic Scale Co., of Bloomington, Ill., has issued an attractive circular calling attention to some of the advantages of the National Automatic Scales. The scale is described in detail, especially in regard to new features which have been added during the past few months.

On March 17 A. H. Van Duzee celebrated the twenty-fifth anniversary of taking the management of the milling department of the Great Western Manufacturing Co., Leavenworth, Kan. During this time the business of the company has had a wonderful growth, the company now ranking as one of the leading mill builders of the country.

Owners of elevators who contemplate doing any spring painting will find valuable information on the subject in Booklet 17-B, issued by the Joseph Dixon Crucible Co., Jersey City, N. J. This company has been making Dixon's Silica Graphite Paint for forty-five years and places the experience of its paint department at the command of those who desire to avail themselves of it.

The Union Iron Works, Decatur, Ill., have recently made arrangements with Rhinehart Smith of Sidney, Ohio, who has been their representative for the past twelve years, to carry a complete stock of repairs for "Western" Shellers. He is now in a position to receive orders and forward repairs promptly to all points in his vicinity. This will prove a great convenience to the many elevators in that section using "Western" Shellers.

R. J. Moulton and S. F. Evans, who have been connected with the Barnett & Record Co., one of the leading contracting firms of the Northwest, for the past twenty years; have withdrawn from that company and have formed the partnership of Moulton & Evans for the purpose of conducting a general contracting business with offices at 406 Corn Exchange, Minneapolis. Moulton & Evans have taken over the country elevator building department of the Barnett & Record Co., who have retired from this line of work. They will also do a general engineering business, making a specialty of elevator and heavy warehouse construction.

In their catalogue describing the Field Gas and Gasoline Engines, the Field-Brundage Co., Jackson, Mich., give some valuable information on the selection of an engine of this kind and proceed to explain in detail the points of superiority of the Field Engine. This engine is built in sizes ranging from 4 to 30 horsepower and is especially adapted for service in grain elevators. It is equipped with an automatic starting device, is very quiet in operation and requires comparatively little attention. The catalogue shows the various sizes of the engine and also illustrates many of its special features. A copy may be had for the asking.

The Fosston Manufacturing Co., St. Paul, Minn., whose advertisement appears elsewhere in this issue, are manufacturers of the New Process Cleaner and Separator, which is a new departure in machinery for cleaning grain. The inventor of this machine is T. O. Helgerson, who is considered one of the best informed and practical men in the Northwest on the subject of grain cleaning. The New Process represents Mr. Helgerson's ripened experience and some very strong claims are made for it. In construction it differs radically from anything heretofore on the market, but is claimed to handle all kinds of mixed grain with ease and rapidity. The company has issued a catalogue describing this and

other cleaners and will send a copy to any one who is in the market for equipment.

There is, perhaps, no subject on which elevator owners are less informed than on the manner in which insurance rates are fixed and the possibility of saving by improving condition in their plants from the insurance stand-point. This being so, a booklet issued by the Grain Dealers' National Mutual Fire Insurance Co., Indianapolis, Ind., is especially interesting. The booklet is entitled "Elevator Construction" and illustrates by cuts and description the conditions under which rates are made on the country elevator. Starting with the least desirable risk—the all-frame house—the manner in which each additional improvement reduces the rate is graphically shown. Those whose insurance rates are unduly high should write for a copy of this booklet and learn how they can be reduced.

The Foos Gas Engine Co. of Springfield, Ohio, have issued a new catalogue, No. 21, devoted to their line of horizontal, stationary and portable engines. Typographically the catalogue is one of the handsomest that has ever been received at this office. It is 9x7½ inches in size, with 56 printed pages. The cover is a beautifully delicate shade of gray, with a design embossed in bronze green and black, the whole forming a most pleasing combination. The book is illustrated with halftones, which bring out

Plansifter mill, using Barnard & Leas machinery. All this has been done without clerical assistance, but Mr. Grabill was promptly on the different jobs when needed.

AN ATTRACTIVE ELEVATOR.

Cleanliness about one's premises is a sign of good business and personal habits that go far to favorably impress the public. With grain doors carefully piled near to the place where they will eventually be used, with the scale platform clean and the surroundings of the office and buildings free from the litter that so easily and rapidly accumulates about the premises, one can but conclude that here is a business one can deal with without apprehension. The picture of the Elevator of Fred E. Davison at Rock Falls, Ill., so impresses one, and the impression is in every way justified.

The main building here is 90x30 ft. and 70 ft. ft. high; crib construction. There are 14 overhead bins, each of 1,000 bushels' capacity, while in the two wings are four more large bins, each of 10,000 bushels' capacity, making the total storage capacity of the plant 55,000 bushels.

This grain is handled by conveyors under each wing, which move the grain to the elevator both in the main house. At the elevator head is an adjustable distributing spout for filling the overhead



FRED E. DAVISON'S ELEVATOR AT ROCK FALLS, ILLS.

the details of the engines and parts very clearly, and this is supplemented with concise and intelligible descriptive matter. The catalogue describes the Foos Single-Cylinder Engines in a few of their many combinations and goes into detail sufficiently to familiarize an intending purchaser with the line. A copy of the catalogue may be obtained by writing the Foos Gas Engine Co. direct.

N. A. Grabill, the well-known elevator builder of Daleville, Ill., has completed the Pierce Elevator Co.'s 35,000-bushel house and announces that it has been put in operation without a hitch. No changes whatever were necessary and all the operators had to do was to keep the bearings lubricated. The elevator is equipped with the following machinery: Barnard & Leas 9x18 Three-High Meal and Feed Mill, one meal bolt. B. S. Constant Drag Feeder and U. S. Sheller, Foos Scientific Crusher for ear corn, one No. 16 Ferrell Seed Cleaner, one 1,000-bushel "Eureka" Combination Grain Cleaner, two Wilbur Overhead Power Dumps, with a full line of Weller transmission machinery. The engine is 40 horsepower and a 50-horsepower boiler supplies steam.

In addition to this house Mr. Grabill has built and put into successful operation the following plants during the past season: A 10,000-bushel elevator at Linwood, Ind.; a 20,000-bushel elevator at Green-town, Mich.; a 15,000-bushel elevator at Sturgis, Mich.; a 35,000 bushel elevator at Union City, Ind. He has also remodeled the 8,000-bushel elevator and mill at Parker City, Ind., the 10,000-bushel elevator at Pleasant Mills, Ind., and the elevator at Fountaintown, Ind. Mr. Grabill also remodeled the 50-barrel reel mill at Union City, Ind., to a 75-barrel

bins. These bins also may be emptied into the boot for re-elevation to be loaded into cars or shifted to other bins. The power is a 7½-h.p. electric motor. There being a double dump in the driveway, and a single elevator leg with 14x7-in. cups, the house will handle 2,000 bushels of grain per hour quite easily.

The house was remodeled in 1907 by the Burrell Engineering and Construction Company and has been found very satisfactory since, being rapid in the handling of the grain and doing it very economically.

E. R. Kone, Commissioner of Agriculture of Texas, in a recent statement regarding the corn crop of that state, said: "In 1870 there were 893,962 acres in corn in Texas, producing 23,690,000 bushels. In 1880, 2,670,180 acres were planted to corn, producing 66,754,000 bushels. In 1890 the acreage had almost doubled, reaching 4,116,281 acres, but owing to severe droughts in some sections, and disastrous floods in others the corn crop was very low, producing only 83,802,000 bushels. In 1900 the increase in acreage was very slight, reaching 4,553,495 acres, and producing 81,962,10 bushels. The corn crop never meant much over a hundred millions till in 1903, when the acreage was 5,310,140, and the crop reached 140,750,933 bushels." Nevertheless, he says that Texas does not grow enough corn. "We have not reached," he said, "the limit of production and consumption by half. Not one farmer in ten is producing all the corn his cultivated land is capable of producing. The few who are putting brains in their work have made marvelous progress, but still they have not reached the limit of their soil's productive capabilities."

PERSONAL

William Hutchinson has taken charge of the new elevator at McArthur, N. D.

M. Libaire has secured the position of manager of the Hubbard-Palmer Elevator at Hartford, S. D.

A new grain door has been patented by Mr. Nesbit, agent of the Atlantic Elevator Co. at Deep, N. D.

S. M. Granger, auditor for the Hubbard-Palmer Co., will shortly remove from Adrian to Kasota, Minn.

E. P. Lindgren has removed from Campbell to Russell, N. D., where he has taken charge of an elevator.

Christian Erickson has succeeded A. Holmes as grain buyer for the National Elevator Co., at Hallock, Minn.

Daniel Q. Webster has succeeded George B. Warren as manager of the Jackson Grain Co.'s elevator at Monmouth, Ill.

Jacob J. Stroble will resign as manager of the Hawkeye Elevator at Lowry, S. D., and will be succeeded by John Figor.

F. W. Watson, formerly of Unionville, Mich., has taken up the management of the Millington Grain Co. at Millington, Mich.

Ralph Rhode has resigned as manager of the Farmers' Elevator Co. at Larrabee, Iowa, and has been succeeded by Emerson Wetloeffler.

J. A. Heath, general manager of the Richmond (Mich.) Elevator Co., recently made a business trip to New York, Boston and other eastern cities.

L. D. Haight has succeeded E. D. Knadle as grain buyer at the Osborne-McMillian Elevator at Lidgerwood, N. D. Mr. Knadle has removed to South Dakota.

C. J. Alister has resigned his position with the elevator at Berlin, N. D., and has removed to La Moure, N. D. Mr. Alister will shortly enter upon his duties as County Auditor.

F. H. Sloane has succeeded to the position of A. H. Molander with the Osceola Mill & Elevator Co. at Osceola, Wis. Mr. Molander resigned to take charge of an elevator at Midway, Wis.

P. M. Ingold has disposed of his grain interests in Minneapolis to the Brooks Elevator Co., and removed to Cuba, where he will reside permanently. Mr. Ingold has large fruit and tobacco investments in Cuba.

F. E. Gleason has resigned his position as manager of the Bingham Bros. Elevator at Sanborn, Minn., in order to devote his whole time to his machine business. Clarence Posz will succeed to Mr. Gleason's position.

BARLEY AND MALT EXPORTS, ETC.

Following are the total exports of barley and malt for the month of February, 1909 and 1908, and for the eight months ending with that month:

	1909.	1908.
February—Barley, bushels....	124,244	275,527
February—Malt, bushels....	13,324	10,223
Eight months—Barley, bus....	6,081,688	3,863,846
Eight months—Malt, bus....	110,580	174,094

IMPORTS.

Following are the total imports of barley and malt for February, 1909, and the eight months ending with February, compared with same period of 1908:

	1909.	1908.
February—Barley, bus.....	1,120	18,747
February—Malt, bus.....	1,399	196,317
Eight months—Barley, bus....	27,000	34,000
Eight months—Malt, bus....	64,000	16,000

EXPORTS FROM ATLANTIC PORTS.

The exports of breadstuffs, as compiled by George F. Stone, secretary of the Chicago Board of Trade, from the Atlantic ports during the two weeks ending April 10, 1909, as compared with same weeks last year, have been as follows:

Articles.	For Week Ending April 10.		For Week Ending April 11.	
	1909.	1908.	1909.	1908.
Wheat, bushels....	695,000	881,000	526,000	806,000
Corn, bushels....	1,157,000	363,000	1,414,000	669,000
Oats, bushels....	10,000	4,000	13,000	1,000
Rye, bushels....	38,000	.....	26,000	.....
Barley, bushels....	27,000	34,000	64,000	16,000
Flour, bbls....	117,100	258,500	188,900	255,800

The Farmers Elevator at Lake Benton, Minn., has failed and it is said that they are between \$12,000 and \$15,000 in the hole. To make up the deficit the stockholders will have to be assessed about 250 per cent.

RECEIPTS AND SHIPMENTS.

Following are the receipts and shipments of grain, etc., at leading receiving and shipping points in the United States for the month of March, 1909:

BOSTON—Reported by Daniel D. Morss, secretary of the Chamber of Commerce.

Articles	Receipts		Shipments	
	1909	1908	1909	1908
Flour, barrels....	156,614	177,473	51,954	55,832
Wheat, bushels....	351,170	307,147	598,049	906,021
Corn, bushels....	621,484	185,668	310,354	126,559
Oats, bushels....	438,124	466,311	.....	.....
Rye, bushels....	5,999	13,276	.....	28,800
Barley, bushels....	72,958	21,400	162,242	.....
Flaxseed, bushels....	500	2,907	.....	.....
Peas, bushels....	9,677	4,806	.....	.....
Millfeed, tons....	2,612	1,237	12	38
Corn Meal, barrels....	4,715	4,450	2,055	1,436
Oat Meal, barrels....	8,500	12,901	5,487	7,251
Oat Meal, sacks....	19,588	21,897	14,742	2,820
Hay, tons....	14,430	13,110	124	41

CHICAGO—Reported by George F. Stone, secretary of the Board of Trade.

Wheat, bushels....	2,066,748	808,866	1,215,379	2,161,295
Corn, bushels....	9,664,750	7,899,896	7,458,716	5,660,635
Oats, bushels....	8,096,490	11,329,722	6,646,565	7,056,267
Barley, bushels....	3,860,000	1,731,700	1,040,267	771,001
Rye, bushels....	125,000	158,200	95,388	152,003
Timothy Seed, lbs....	6,217,139	4,047,321	3,038,011	3,357,767
Clover Seed, lbs....	822,449	904,037	984,806	504,224
Other Grass Seeds, lbs....	2,741,917	767,656	7,189,564	6,087,751
Flax Seed, bushels....	141,000	123,861	8,567	57,420
Broom Corn, lbs....	660,363	1,520,306	501,409	643,620
Hay, tons....	25,183	29,346	1,609	2,868
Flour, barrels....	812,249	881,969	613,374	757,224

CINCINNATI—Reported by C. B. Murray, Supt. of the Chamber of Commerce.

Wheat, bushels....	387,540	286,772	376,616	149,900
Corn, bushels....	731,324	829,630	404,832	393,990
Oats, bushels....	414,396	625,970	264,500	366,872
Barley, bushels....	41,014	32,470	16,236	274
Barley Malt, bushels....	212,060	130,704	64,798	53,950
Rye, bushels....	71,770	96,070	13,222	30,186
Timothy Seed, bags....	598	5,708	6,657	3,482
Clover Seed, bags....	5,333	5,473	7,601	5,249
Other Grass Seed, bags....	11,079	9,757	15,672	14,543
Hay, tons....	20,344	14,118	14,536	8,391
Flour, barrels....	137,630	130,707	96,503	67,715

CLEVELAND—Reported by M. A. Havens, secretary of the Chamber of Commerce.

Wheat, bushels....	19,807	72,882	19,559	36,200
Corn, bushels....	401,013	451,984	157,495	184,715
Oats, bushels....	846,900	423,273	156,617	145,518
Barley, bushels....	58,698	11,218	..	..
Rye, bushels....	400	.....	.....	.....
Flax Seed, bushels....	.....	17,117	.....	.....
Hay, tons....	4,309	3,243	279	499
Flour, barrels....	53,810	46,540	13,860	17,240

DETROIT—Reported by F. W. Waring, Secretary of the Board of Trade.

Wheat, bushels....	158,320	104,860

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FIELD SEED SECTION

ANNUAL SEED TRAINS.

The agricultural train run in March over the C. H. & D. Ry. passed through eleven counties in the western part of the state. The lectures were well attended. Over 6,000 farmers were reached directly.

The "More and Better Oats train in Iowa passed the state on the St. P. & D. M., C. M. & St. P. I. C., and Rock Island routes. It was in charge of Profs. Holden and Bowman of Ames, assisted by Profs. Crossley and Bell, and Messrs. A. E. Quaife, M. L. Wilson, R. E. Drennan and R. K. Bliss, all experienced lecturers and workers in this line.

A similar train passed through South Dakota later on the C. M. & St. P. and C. & N. W. roads in charge of Profs. Holden of Iowa and Willis of South Dakota.

OATS EXPOSITION.

The Pioneer Oats Exposition of America will be held in Cedar Rapids, Iowa, early in 1910, of which full and detailed announcement will be issued from time to time. As a preliminary announcement the Exposition Company takes pleasure in naming the following classes open to all America, with similar ones open to Iowa only: Best bushel of oats accompanied by three-inch bundle of same in the straw, best three sheaves of oats, best display of oats and other small grains, best oats of each standard varieties, names to be announced later. There will also be an oat judging contest; prizes for the best written article on growing oats, and a shocking contest. Those who are interested may address the secretary Pioneer Oats Exposition, Cedar Rapids, Iowa.

NEW EARLY-MATURING CORN.

The Minnesota Experiment Station is distributing a new variety of early maturing corn, known as Minnesota No. 23. It has been developed at the station and is especially suited to the short season of the northern part of the Northwest, as No. 13 is adopted to be southern part. The variety originated with Jacob Bergh, of Mentor, who in 1893 sent a small amount of the seed to the station. It was first reported on account of the low yield, but in 1905 it came to the notice of C. P. Belle, assistant agronomist, who began work with it, who now describes the variety as follows:

The average sized ear of Minnesota No. 23 is 6.5 inches long and 5.0 inches in circumference. Selected ears have an average of 84.5 per cent of corn to the ear. The form of the ear tends slightly toward the tapering. In color it is a white-capped yellow dent. The space between the rows of kernels is slight, just enough to show the rich yellow of the body of the kernels. The kernels are not what may be termed deep, but are well formed, with straight sides and square shoulders. They are a little on the thin and broad order and bear an oblong, medium deep indentation. The cob is white and bears about 16 per cent of the ear weight, thus leaving 84 per cent of shelled grain. The stalks are small, clean cut, well leafed and usually free from suckers.

The early maturity, size and yield of Minnesota No. 23 corn recommends this variety to the northern part of the state. It is not recommended nor advised for the southern half of the state. The experiment station has only ten bushels of selected seed for distribution to the farmers of Minnesota. On this account, one-fourth bushel is the most that can be sold to any one individual.

THE SEED SCHEDULE, PAYNE BILL.

The seed dealers of the United States are practically unanimous for a change in the method of assessing duties on seeds, from an advalorem to a specific tax. The objection urged against the advalorem duty is the frequent and rapid changes on the export price of seeds, a fact that U. S. appraisers do not seem to be able to comprehend. Inasmuch as a false statement of value is a serious offense, seed dealers are laid open to suspicion of making a false statement of cost, or value, whenever they make a particularly happy purchase abroad, and many firms, in spite of their oaths, and in spite of this well known fact of variation in price, especially of seeds contracted for from seed powers abroad, have that more than the advantage gained by the arbitrary rulings of the appraisers.

The request of congress to change the manner of levying the duty has the support of the American Seed Trade Association, many members of which have filed briefs asking that a specific duty be levied instead of an advalorem duty. They speak of the humiliation to a reputable and law-abiding house to be taken into court like a malefactor, when its every act has been exactly according to law. They do not care what the rate of duty is, nor how high it is placed. All they desire is a duty of so much a pound, cutting out the advalorem features and its disagreeable and perhaps dangerous aspect.

[From Bulletin No. 155, Kansas A. C. and E. S.]

CURING ALFALFA SEED.

BY A. M. TEN EYCK.

Alfalfa seed should be cleaned with a good fanning-mill before selling off the farm, and all light seed, dirt and weed seed removed as far as possible. This extra work is usually well paid for in the better price received for clean seed. If the alfalfa is green or damp when thrashed, the seed had best be spread twelve or eighteen inches deep on a tight floor in a dry place and shoveled over once or twice to dry it before it is cleaned and sacked. Prime alfalfa seed should have a bright, clear, light golden or slightly greenish color. Seed which has been wet or bleached in the field will be darker in color, while heated seed will have a brownish dead color, indicating its lack of vitality.

From the grower's standpoint, the best time to sell the seed is when the price is highest. Prime seed usually sells at a high price early in the fall, when there is apt to be a shortage of seed for fall sowing, and again early in the spring, about March 1, seed often brings the highest price, depending largely upon the supply and demand. Alfalfa seed retains its vitality for several years if carefully stored and saved, and it may often be to the interest of the grower, when seed is plentiful and the price low, to hold the seed for a better market.

Aside from its use for sowing, alfalfa seed has a standard market value in Europe for dyeing purposes, being used in the printing of cotton fabrics, and large quantities of seed have been exported from this country to supply the foreign demand. For different years and in different parts of the country the price ranges from seven to fifteen cents per pound. A bushel of alfalfa seed weighs sixty pounds. Three to four bushels of good seed per acre is a profitable crop. The average crop in the more favored alfalfa regions ranges from five to seven bushels per acre, while yields as high as twelve bushels per acre have been reported. A yield of less than two bushels per acre is an unprofitable crop.

PRIZES FOR CORN AT DES MOINES.

At a meeting of the board of directors of the Iowa Corn Growers' Association on March 17 the classes of corn for the winter corn show to be held in Des Moines were decided upon as follows:

Class A of the premium list is for ten ears. Prices will be offered for the best ten ears from sections, with a sweepstakes for each of the four divisions and with a grand champion sweepstakes for the state as a whole.

Class B will be for a single ear, same rules to govern as in the A class.

Class C will be fifty ears, open to sections only, being a grand championship class.

Class D will be open to sections only for thirty ears and will be a pure bred class. Reeds Yellow Dent, Silvermine, Legal Tender, Silver King, Iowa, Gold Mine and any variety not named.

Class E is an amateur class, showing ten ears, same conditions as class A.

Class F is an amateur class, twenty-five ears showing, open to sections.

Class G is the Bushel Special, seventy ears showing, open to sections. Sweepstakes for first and second sections, sweepstakes for third and fourth sections. Grand championship.

Class H is the Acre Yield Special, open to sections only, award for the largest acre yield of good corn.

Class I is the Silo Special. One silo to the best fifteen ears shown from two Northern sections and one silo for the best fifteen ears shown from the two Southern sections.

Other and special classes will be added, for a few special premiums; and there will be premiums for

ornamental work and others, probably for popcorn and for Kaffir corn.

A FIGHTER OF WEEDS.

Prof. W. T. Beal of the Botany Department of the Michigan Agricultural College is father of the pure seed bills before the legislature of that state, designed to improve the methods of handling seeds. The bill creates the office of Seed Inspector. Should the bill become law, not only would such inspector have the right to examine any seeds on the market, but also the right to give out a public report, giving the names of the firms handling the best quality, and telling the truth about the others.

Dr. Beal says that the adulteration of seeds has largely multiplied the number of weeds growing in Michigan.

"When this Michigan of ours first became a state," Dr. Beal says, "there were only thirty-five varieties of indigenous weeds growing on its lands. Now there are 206 that I personally know of, for I have a sample of each in my laboratory. And if I have that many, it is safe to assume that there are many more. In the same report from which I got the list of the original weeds in this state, Europe and Asia were charged with seventy-eight. The deduction is simple—the older the country, the more numerous are its weeds. And likewise is it true that every year sees more weeds on a farm than the year previous."

Dr. Beal is a native of Adrian, Mich., where he was born in 1833 on a farm. He was educated in Michigan schools and has since his under-graduate years closed been a teacher in the same institutions. He has been connected with the Michigan Agricultural College near Lansing since 1870, when he first went there as a lecturer in botany. He is the author of reports, lectures and accounts of experiments in Michigan Agricultural Reports from 1870 to 1898. He is also the author of several books along scientific lines. The botanic garden of the College, of which there are only three older in this country, was started, and has been under his constant direction.

SEED ADULTERATION.

During the calendar year 1908, as directed by statute, the Department of Agriculture purchased in the open market for analyses for adulteration, 1,471 samples of grass, clover and alfalfa seed, 102 of which samples were found to be adulterated or were branded, the names of the dealers handling said samples being published in circular 28, under date March 17, 1909. A general statement of the results of the analyses would be as follows:

Alfalfa.—Of the 358 samples of alfalfa seed secured, 86 contained seed of sweet clover, 78 seed of yellow trefoil, and in 107 cases dodder was present in varying amounts from a trace to a sufficient quantity to sow 3,600 seeds per square rod when seeding at the rate of 16 lbs. of alfalfa per acre. Only 8 lots of alfalfa were obtained which contained trefoil seed in sufficient quantity to be considered an adulterant.

Red Clover.—Of the 413 samples of red clover seed secured, only 2 were adulterated with yellow trefoil seed. A trace of yellow trefoil seed was present in 164 samples, and dodder was found in 223 samples. Many samples contained large quantities of weed seeds. In seeding one lot at the rate of 8 pounds of red clover seed per acre 679 dodder seeds would be sown per square rod, and by the use of other lots more than 3,500 buckhorn and plantain seeds and 2,600 green foxtail seeds would be sown per square rod.

Orchard Grass.—Of the 343 samples obtained as orchard grass seed, 2 samples contained no orchard grass seed, 2 were orchard grass seed adulterated with chess, and 49 were orchard grass seed adulterated with seed of rye-grass or meadow fescue, or both.

Kentucky Bluegrass.—Of the 357 samples of Kentucky bluegrass seed obtained, 25 were found to contain Canada bluegrass as an adulterant, 12 were practically all Canada bluegrass, containing only a trace of Kentucky bluegrass seed, and 2 were meadow fescue misbranded and offered for sale under the name of Kentucky bluegrass seed.

It is encouraging to note [says B. T. Galloway, chief of Bureau of Plant Industry, in submitting the report] the falling off in the trade in adulterated seeds since the line of work reported upon in this publication was begun. The importation of yellow trefoil seed and its subsequent use as an adulterant of red clover and alfalfa seed has practically ceased, 214,000 pounds being imported in the three fiscal years 1905-1907, and only 10,000 pounds in the fiscal year 1908.

Only one-half as many lots of orchard grass seed were found to be adulterated in 1908 as were found

in 1905, when the last collection of orchard grass seed was made.

In 1908 only 39 samples of Kentucky bluegrass seed were found to be adulterated or misbranded, as contrasted with 110 samples in 1907.

As has been previously stated in its publications, this Department, through the Seed Laboratory, will examine and report promptly as to the presence of adulterants and dodder in any samples of seed submitted for that purpose.

HOW SEED CORN BEHAVES.

In a recent lecture before the Texas Farm Congress, Prof. A. M. Ferguson of the Texas Seed Breeding Farms at Sherman, speaking to the question, "How may the demand for good seeds be legitimately?" paid particular attention to growing tests of various varieties of seed corn, in the course of which he said:

Without going into detail, I will state that these tests were made in a way that is used and indorsed by our experiment stations. The seeds were secured from the bags and planter boxes of farmers in many instances. I give only a few to illustrate the difference in yielding power. I also use the names of the varieties furnished by the parties from whom the seeds were secured. They were purebred seeds in only a few cases, and showed the following yields per acre in bushels:

Munson	47
Boone county white (Texas seed).....	42
Calico	42
Surcropper	40
Cooks' Prolific	34
Giant White	34
Hickory King (Texas seed).....	28
Hickory King (Tenn. seed).....	18
Iowa Silver Mine (Texas-grown).....	30
Iowa Silver Mine (Northern seed).....	23
Ried's Yellow Dent (northern seed).....	32
Early Leaming (Northern seed).....	22

[One] recommendation which I think should be made is this: "Use home-grown seed of native varieties." In support of this suggestion for the improvements of our corn crops I want to call attention to the results from an experiment made to test the effect of climate on the yielding power of seed corn. For this experiment I secured seed of Boone County White from the following localities: Texas, Missouri, Tennessee, Illinois, Indiana and the District of Columbia. Every one of these samples was pure-bred seed of Boone County White, and differed from each other only in that the seed used had been grown for some years in the states named. The seeds were supplied by the United States Department of Agriculture, and the crop harvested and weighed in the presence of an officer of that Department. The yield in bushels per acre yield of native seed of Boone County White in a test with foreign seed was as follows:

Texas seed	42
Missouri seed	37
Tennessee seed	35
Illinois seed	34
Indiana seed	36
District of Columbia.....	28

I respectfully submit these figures for the consideration of that large body of Texas farmers who continue to insist on using Northern-grown seed corn. I am sorry to say that many thousand bushels of such seed are used in this state every year. It, in part, accounts for our low average yield. The answer that these farmers make who are under the influence of Northern seed catalogs, may be that Boone County White is not the right variety. I can best meet their objections by using the varieties they recommend. The foreign varieties named in the first table include the ones most often used in this state. It will be noticed here that the native varieties are much better yielders. With these facts in mind I think you will agree with me that our farmers need to discontinue the use of Northern seed and to not only use native-grown seed of native varieties, but to exercise some discrimination in selecting the varieties.

THE CORN SHOWS.

At the Corn Show at New Richmond, Wis., on March 14, there were 228 entries. The judging was by Prof. R. A. Moore of Madison, who after awarding the prizes gave a lecture on corn culture. The five main prizes were awarded as follows: First, B. A. Imholt of Houlton; second, R. W. Brunner of Hudson; third, William L. Bennett of Stanton; fourth, Miles Jennings of Spring Valley, fifth William E. Bennett, New Richmond. Twenty-two other prizes were awarded.

W. O. Paisley, formerly of Lincoln, Ill., has been appointed manager of the National Corn Exposition to be held at Omaha, on Dec. 8-18, to succeed J. Wilkes Jones, who goes to Idaho to engage in the fruit business.

The date of the annual National Corn Exposition at Omaha has been changed from Dec. 13-18 as previously announced to Dec. 8-18.

The Iowa Corn Growers' Association's annual Corn Show will be held at Des Moines on Dec. 1-11. Arrangements have been all but completed for the holding of the Horticultural Society's annual fruit

show in connection with the Corn Show, and negotiations are progressing favorably looking to the holding of the State Dairy Show in the same building and on the same dates.

The Tri-State Fair Association is planning to hold a Corn Show at Memphis next fall. A large number of local corn clubs are in existence in Mississippi, Arkansas and Alabama, and the plan is to have these offer prizes to their members and then to show the winning grain and award prizes to the best at Memphis.

An association has been organized at Boston to prepare for a corn exposition to be held in Boston in 1910, in which all the New England states will be invited to take an interest. Of the organization N. H. Brewer of Hockanuno, Conn., is president, and J. Lewis Ellsworth, secretary of the State Board of Agriculture, Boston, is secretary. There are also a vice president and a vice-secretary for each of the six New England states.

President Brewer has circulated a letter all over New England in which he says: "The state vice-presidents and secretaries will be the organizing force in each of their states, and the hearty co-operation of everyone interested in corn is urged. It is hoped each of the six New England states will have a corn-growers' association in actual operation early this season. Many manufacturers and others have already indicated their desire to aid in booming corn when the proper time comes. Let us lose no time in getting this big corn propaganda on its feet, and thoroughly organized, for the forthcoming exposition."

The annual state corn growing contests, under the patronage of the state legislature, will be continued in South Carolina this year as usual. Any person may compete, each contestant to grow one acre of corn, following his own judgment as to all details, but must report all particulars relating to growth, tillage, etc., on forms set out in the "Contestants' Manual." At harvest each contestant must supply one sample bushel of ear corn of the crop and one pint of sample seed, to be sent to the chemist for analysis. The points on which prizes will be awarded are (1) purity of seed, (2) methods, (3) character of the report made, (4) yield, (5) quality, (6) profit; the prizes (7) run from \$25 to \$125.

FIELD SEED NOTES.

Geo. M. Dallas delivered to McBeth & Dallas, alfalfa seed dealers at Garden City, Kan., a single load on March 11 valued at \$3,000, exceeding by \$1,000 the value of the load marketed by Niquette brothers a few months ago.

As a result of his prize-getting at the Native Corn Exposition last fall, an Iowa farmer who selected 1,200 bushels of corn for seed has sold the bulk of it for \$2 per bushel, with orders coming in for the seed almost as fast as he can fill them. Next year he will have a still larger display "if the crop is anything like it should be."

The Ratekin Seed Company of Shenandoah, Ia., has announced their intention to erect one of the largest seed houses in the West on their premises at Shenandoah. The building is to be 60x150, three stories high with basement, constructed of brick and cement and fireproof throughout. The approximate cost of the building will be from \$40,000 to \$50,000.

A new early oat has been imported from Canada by the Iowa Small Grain Growers' Association. The oat is known as the Daubney. It is a white oat with strong, mediumly coarse straw. Tests at the Ontario Station have shown it to be a very heavy yielder, the average being there 92 bushels to the acre. It is considered to be one of the best early oats in that section of the country. One of the good points about it is that it has a very thin hull.

The Missouri state report dated April 3 says that owing to the sudden freezing and thawing last winter the clover has frozen out of the ground very badly. Condition now 74 per cent, which is lowest since spring of 1906 and is 11 points below average for past five years. Indications are that much of the old clover will be plowed up and planted to

corn. The sections worst affected are the northwest and a few counties in the west central and a few in the northeast section.

The Canadian government seems to have pursued its habitual policy of losing money in distributing oats for seed in Saskatchewan and Alberta in 1908, according to Ottawa reports. For some reason the oats for 1908 were purchased in England to the extent of 425,803 bushels. The loss on this transaction was \$78,695, of which the government of Saskatchewan is liable for \$40,980; the government of Alberta, \$8,637, and the Dominion government, \$29,077. The amount paid for the 425,803 bushels was \$288,458.

Summing up a general report on European clover and grass seeds, R. Liefmann Söhne Nachf, Hamburg, February 23, say: "We shall have large requirements in Europe, while all wants have hitherto been easily covered by the surplus of France, Silesia, Bohemia and Moravia. America furnished materially less seed to Europe than was earlier expected. For this reason stocks of American Red in Hamburg are very light, while formerly, when American prices were offering continued possibilities to import from your side, we used to carry a stock of about 10,000 bags."

An Ohio dealer writes Zahm & Co., Toledo, on March 22: "We think the next crop will be short for two reasons; first, last summer's drouth was hard on clover meadows and killed them out a good deal; second, on account of high price on clover seed last spring the seeding was smaller than usual. We think there is considerable old clover in farmers' hands, but most of it is likely to be held unless prices advance materially." Indiana dealer writes: "The clover crop is in very poor condition. Last spring's seeding was nearly all killed by the severe drouth, and farmers tell me now that the old clover has been badly injured, if not entirely killed by the recent freezing and thawing weather. Some seed held, but farmers say they won't sell except at higher prices."

Fred Mayer of J. F. Zahm & Co., Toledo, who was on the C. H. & D. agricultural train which passed through eleven counties in the western part of Ohio said: "Some of these raised more red clover than others, but every shipper, miller or farmer the writer spoke to reported the outlook very poor; that the long drouth last fall had killed the new-sown and the freezing and thawing since had caused the old to 'heave up.' Some even said there would be no clover seed at all next year. Supplies of old appear rather large, but all report that farmers will hold enough for one or two years' use and with the prospect for next year's crop so poor are inclined to hold all they have. . . . Alsike doesn't seem to be injured and promises a larger crop than last year, at least in the section noted above."

C. A. King & Co.'s letters apropos to clover crop say that in small counties of Ohio farmers holding, some holding to cover a year's or two years' wants, others their entire crop. With good weather in August and September, we look for another good crop. In large counties, clover in farmers' hands will be held, as fields sown last spring look very bad, owing to drought last fall. Farmers say seed won't pay to let it lay for hay, so they will plow it over and plant corn instead. It froze out badly, only alsike standing the severe cold. If other sections have suffered as we have, higher prices are certain before October. In the Indiana small counties the crop is not very promising; old clover will all be put in corn; prospect poor, due to alternate freezing and thawing. In Michigan, large counties, considerable seed being sown here. Scarce any left from last year, as dry weather last fall killed most of it. In Illinois, small counties, farmers are still holding for better prices. All the clover in Central Illinois sown before middle of March was killed by cold. Three-fourths of acreage was sown too early and will have to be resown. This year there is no top to wheat, so it cannot afford usual protection to seed. Farmers buying to resow. In Missouri the farmers have considerable seed, but the quality is not very good.

ELEVATOR AND GRAIN NEWS

IOWA.

Panzer & Corrigan have started a grain business at Tripoli, Iowa.

The Merritt Milling Co. is building an addition to its elevator at Dunlap, Iowa.

The Younglove Construction Co., Sioux City, Iowa, is completing a 12,000-bushel elevator for Gard Bros. of that city.

The Trans-Mississippi Grain Co. of Omaha, Neb., has purchased from John Gray the Illinois Central Elevator at Onawa, Iowa.

The Farmers' Grain Co. of Nevada, Iowa, is planning to build an addition to its elevator and to add considerable new equipment to the plant.

The farmers about Nemaha, Iowa, have incorporated an elevator company with a capital stock of \$10,000 and will operate an elevator at that point.

John Frerichs will tear down his old elevator at Holland, Iowa, this spring and erect a new building. The new house will be equipped with modern machinery.

The Farmers' Grain Co. of Ulmer, Iowa, has been incorporated with a capital stock of \$25,000. W. F. Batie is president of the company and C. L. Beers secretary.

The Farmers' Grain Co. of Oakville, Iowa, has been incorporated with \$10,000 capital stock. Chester Prindle is president of the company and J. A. Duncan secretary.

Farmers' elevator companies are being agitated at several points in Iowa, among which may be mentioned Luther, Stratford, Belmond, Mason City, Storm Lake and Hurley.

The farmers' company at Harcourt, Iowa, recently capitalized at \$10,000, has purchased the Wheeler Elevator on the line of the Fort Dodge, Des Moines & Southern Railway.

The Barnett & Record Co. has let contract for 30 concrete storage tanks for the Quaker Oats Co. at Cedar Rapids, Iowa. The total capacity will be 300,000 bushels. Work started April 15.

The Shore Line Elevator Co. has been organized at Hampton, Iowa, with Fred Nancolas as president and John Reeve as secretary. The company will probably build an elevator at Hampton.

The Farmers' Elevator Co. of Iowa Falls, Iowa, has decided to unite with the farmers near Macy, Iowa, and build an elevator at that point. The company will then be operating two elevators.

The Farmers' Elevator Co. of Laurel, Iowa, has purchased the entire business and property of the D. L. Patton & Sons at Laurel, Iowa, and will take possession May 1. The consideration was \$8,000.

The new elevator of Chalmers & Eldridge at Washington, Iowa, built by the Younglove Construction Co. of Sioux City, Iowa, was put in operation on April 2. The house has a capacity of about 30,000 bushels.

Cohen Bros. Iron and Metal Co. of Des Moines, Iowa, have begun extensive improvements on the old elevators at East Des Moines, remodeling the buildings and installing new machinery, with a view to conducting a grain business.

B. M. Huntley of Boone, Iowa, has organized the B. M. Huntley Grain Co., with headquarters in that city. The company is capitalized at \$10,000, and will erect a 20,000-bushel elevator on the line of the North-Western at Boone. B. M. Huntley is president of the company, and B. G. Huntley secretary and treasurer.

ILLINOIS.

E. T. Martin has leased the elevator at Newton, Ill.

Work has begun on the new elevator of John Davis at Chesterville, Ill.

The Mineral Grain Co. of Mineral, Ill., has been incorporated with a capital stock of \$10,000.

Shoemaker & Cook of Lockport, Ill., are planning to erect a 10,000-bushel elevator at Romeo, Ill.

The Farmers' Grain Co. at Sicily, Ill., has purchased a site in that town and will erect an elevator.

C. E. Fletcher has taken possession of the elevator at Royal, Ill., which he recently purchased of Coon Bros.

The old Big Four Elevator at Kankakee, Ill., now the property of Risser & Rollins, is being torn down.

The Taborman, Mackey & Lucas Co. has been incorporated at East St. Louis, Ill., with a capital stock of \$15,000, to conduct a grain business.

The Farmers' Grain and Elevator Co. at Bolivia, Ill., has placed an order for a sheller, cleaner and other machinery with which to remodel their eleva-

tor, with the Union Iron Works, Decatur, Ill. Work will be begun at once.

The Farmers' Grain Co. of Palmer, Ill., will increase its capital stock from \$10,000 to \$12,000. A new elevator will shortly be erected.

The Sparks Milling Co. of Alton, Ill., has asked permission to use city ground near the milling plant for a site for another elevator.

J. J. Kemp, Jr., has purchased the plant of the Lexington Elevator Co. at Lexington, Ill., and taken possession. Mr. Kemp formerly owned the elevator.

Stott Bros. have purchased the elevator at Risk, Ill., formerly owned by the Rogers Grain Co. This acquisition gives them four elevators at various points.

William Zierfuss has sold his elevator at Randolph, Ill., to Fred Martin of Bloomington, Ill., who has moved to Randolph and taken possession of the business.

Rising & Murray recently installed a new automatic scale, manufactured by the National Automatic Scale Co. of Bloomington, Ill., in their elevator at Bondville, Ill.

The Kempton Farmers' Elevator Co. has begun tearing down its old elevator at Kempton, Ill., and will replace the house with a new 55,000-bushel structure, to be completed May 1.

George B. Griffin of Charleston, Ill., has just installed a "Western" Gyrating Cleaner of the latest improved type and other equipment, furnished by the Union Iron Works, Decatur, Ill.

The Farmers' Elevator Co. of Assumption, Ill., will start the erection of their new elevator in the near future. The plans and equipment for it will be furnished by the Union Iron Works of Decatur, Ill.

White & Kellogg, grain dealers at Cambridge, Ill., and proprietors of an elevator at that point, emphatically deny that they are going out of business, as was erroneously reported last month. It is not known where the false report started.

The newly organized Barr Grain Co. of Plainfield, Ill., has taken over the Caton Farm Elevator, the Plainfield Elevator and the Frontenac Elevator, all located within a short distance of Plainfield. Later the company may buy or lease more elevators.

The old Michigan Central Elevator at Joliet, Ill., occupied by E. W. Wagner & Co. of Chicago, will shortly be torn down to make way for the elevated tracks of the combined Michigan Central and Rock Island systems. The structure was erected nearly fifty years ago.

Edward McKee of Tower Hill, Ill., has bought the elevator at Dollville, Ill., formerly operated by James F. Umpleby, and will remodel same and equip it with "Western" Sheller, Gyraizing Cleaner and Ear Corn Feeder, to be furnished by the Union Iron Works of Decatur, Ill.

The elevator of K. C. Reed at Nelson, Ill., will shortly be moved a distance of some forty feet in order to make way for the new Nelson-Nachusa cutoff of the C. & N. W. The removal of the elevator will be a considerable undertaking, in view of the fact that it contains over 11,000 bushels of grain.

MINNESOTA AND WISCONSIN.

A new elevator is reported from Deer Creek, Minn.

A new elevator will be erected at Tintah, Minn., during the coming summer.

The Equity Society is planning to build a new elevator at Pemberton, Minn.

B. F. Orr has purchased the elevator of the Big Diamond Milling Co. at Northfield, Minn.

The elevator at Armstrong, Minn., has been purchased by Mr. Haskerude, who is operating it.

Lindquist Bros. are planning to build an elevator at Traverse Lake, near Brown's Valley, Minn.

Bartley Hunt has purchased the elevator of the Great Western Elevator Co. at Arlington, Minn.

The Farmers' Elevator Co. has been incorporated at Columbus, Wis., with a capital stock of \$15,000.

The Interior Elevator Co. of Minneapolis, Minn., has reduced its capital stock from \$350,000 to \$50,000.

The Farmers' Elevator Co. of Waseca, Minn., has postponed the moving of its elevator to some future time.

The elevator at Campbell, Minn., recently destroyed by fire, will be rebuilt during the coming season.

A. B. Gillette of Brown's Valley, Minn., has purchased the farmers' elevator at Beardsley, Minn., and will operate it.

The Citizens' State Bank of Cadott, Wis., has sold the elevator property at that point to parties who will reopen the house.

Nye, Jenks & Co. of Minneapolis, Minn., have placed a contract with the Barnard & Record Co. for ten concrete tanks as annex to their Calumet Eleva-

tor at Minneapolis. Capacity will be 400,000 bushels. Work has just started.

The Equity Society has purchased and taken possession of the elevator of the Osceola Mill and Elevator Co. at Shafer, Wis.

W. W. Crane & Sons have sold their elevator at Stanley, Wis., to Dr. E. F. Burns. Frank Wallace will continue as manager.

Theodore Maas has begun to tear down his old elevator at Mazeppa, Minn., and will erect a new elevator upon the same site.

Samuel Foight has relinquished his lease on the Jargo Elevator at Luverne, Minn., to take a position with the Hubbard & Palmer Co.

The Farmers' Elevator Co. of Barnesville, Minn., is considering the purchase of the Barnesville Roller Mills. The present owner of the plant is Thomas E. Cannon.

T. E. Ibberson, grain elevator builder of Minneapolis, Minn., has just completed a new seed house for the John A. Salzer Seed Co. of LaCrosse, Wis., capacity 60,000 bushels.

The New London Milling Co., which lost its plant at Foley, Minn., by fire on March 12, has commenced clearing away the ruins and will immediately begin work on a new elevator.

Efforts are being made to form farmers' elevator companies at several points in Minnesota. Among them are Lyad, New London, Holdingford, Gaylord, Charlesville, Fergus Falls and Trout Lake.

The Brooks Elevator Co. has purchased the grain interests of P. M. Ingold in Minneapolis. Mr. Ingold will make his permanent home in Cuba, where he is interested in fruit and tobacco propositions.

It is reported that the cash grain men of Milwaukee are behind a movement to erect a 1,200,000-bushel concrete elevator in that city. A site with both a water and a rail outlet is said to have been secured.

O. J. Wing, R. H. Wickam and John Davidson have incorporated the Bombay Farmers' Mercantile and Elevator Co. of Bombay, Minn., with a capital stock of \$10,000. The Loomis Elevator at Bombay has been purchased and will be operated by the new company.

The Great Northern Elevator "X" at Superior, Wis., has been opened up to receive shipments of bonded Canadian grain for storage purposes. Elevator "X" has not been in use for some time, but it was found necessary to open it, as all bonded space in Elevator "S" has been filled.

OHIO, INDIANA AND MICHIGAN.

A farmers' co-operative elevator company is being formed at Tontogany, Ohio.

The new concrete elevator of John S. McDonald at New Albany, Ind., is about finished.

The farmers about Rockfield, Ind., are planning to form a co-operative elevator association.

Edward Heinlen has purchased a site at New Winchester, Ohio, and will erect a large elevator.

It is reported that a new fireproof elevator will be erected at Evansville, Ind., by a merchant of that city.

It is reported that the Lorain Flour & Grain Co. is contemplating the erection of a grain elevator at Lorain, Ohio.

C. D. Smith has bought back the Lyne Elevator recently sold to W. W. Nims by Smith Bros. of Bellevue, Ohio.

The Gwinn Milling Co. is contemplating the erection of another large concrete storage elevator at Columbus, Ohio.

T. A. Weis and others have incorporated the New Weston Grain Co. of New Weston, Ohio, with a capital stock of \$10,000.

Herman Borgerding has contracted for the erection of a large grain elevator near New Albany, Ind. The house will cost about \$10,000.

An agitation has been started for a grain elevator at Simpson, Ind. Both the Erie and the C. B. & Q. roads are favorable to the project.

Bernard Price and C. H. Bruce have sold their elevator on the Monon at Crawfordsville, Ind., to F. C. Williams of Sellersburg, Ind., who will operate the house.

C. S. Hunsicker of Williamsport, Ohio, has recently installed a "Western" Rolling Screen Cleaner and other equipment, furnished by the Union Iron Works, Decatur, Ill.

J. & S. Emison have begun work on the rebuilding of their elevator and corn milling plant, which burned at Vincennes, Ind., several months ago. The elevator will be constructed first.

The Melvin Elevator Co. of Melvin, Mich., has sold its plant to Thomas Wilson, of Marquette, Mich., who will take possession on July 1. The H. W. Carr Co., of Saginaw, Mich., engineered the deal.

William H. Robinson has purchased the half-interest of B. G. Hudnut of Terre Haute, Ind., in the William H. Robinson & Co. Elevator at Clinton, Ind. Mr. Hudnut had held his interest for twenty-

three years. There will be no change in the management of the company.

Bartlett-Kuhn & Co. of Vincennes, Ind., are completing the erection of their 80,000-bushel elevator at Vincennes, Ind., equipped throughout with "Western" machinery, furnished by the Union Iron Works of Decatur, Ill.

The Berkey Elevator Co. of Berkey, Ohio, has been incorporated with \$20,000 capital stock by E. F. Ford, F. E. Sharp, D. A. Lathrop, George Otwell, and D. D. Washburn. The company will operate an elevator at Berkey.

The recently incorporated Rochester Elevator Co. of Rochester, Mich., will either lease the elevator of Ferrin Bros. at that point or erect a new house. E. L. Letts is president of the company, with M. H. Haselwordt secretary.

The grain firm of Bauman & Co., of Chase, Ind., which consisted of William J. and Charles F. Lawson and Daniel L. Bauman, has been dissolved. Lawson Bros. have assumed the business and obligations. Mr. Bauman has moved to Hoopeston, Ill.

William M. Long has purchased the old elevator site at Portland, Mich., and will erect a new elevator, replacing the one burned several months ago. Mr. Long will also establish branch houses at Lyons and Grand Ledge, Mich.

The firm of Meyer & Company of Fort Wayne, Ind., has incorporated under the style of Meyer & Company with a capital stock of \$50,000. In addition to operating the grain elevators and warehouses at Monroeville, Ind., and Convoy, Ohio, the new company will conduct a general grain, hay and straw business. The new corporation has taken over all the property and assets of the old firm.

THE DAKOTAS.

John Turbak has opened up his elevator at Fairmount, N. D.

The Independent Elevator at Kensal, N. D., has been reopened.

A farmers' elevator company has been incorporated at Floyd, S. D.

A new engine was recently installed in the King Elevator at Scotland, S. D.

J. E. Scott & Co. have purchased the Atlas Elevator at Hecla, S. D., and will conduct it.

New scale equipment is to be installed in the Farmers' Elevator at Valley City, N. D.

W. C. Fairbanks of Lakota, N. D., has purchased the elevator of A. D. Medhurst at Russell, N. D.

The Harvey Grain Co. has sold its elevator at Harvey, N. D., to Jacob Heil and Michael Burgar.

T. E. Ibberson of Minneapolis has obtained the contract for the farmers' elevator at Stockholm, S. D.

The Mason Farmers' Elevator Co. has been incorporated with \$25,000 capital stock at Wheatland, N. D.

It is reported that the Jones & Metcalf Elevator, recently burned at Lily, S. D., will shortly be rebuilt.

The new Farmers' Elevator Co. of Waverly S. D., will shortly erect a new 30,000-bushel house at that point.

The Farmers' Co-Operative Mill and Elevator Co. is planning to erect an elevator at Wolsey, S. D., this spring.

A stock company is being formed at Canastota, S. D., for the purchase of J. J. Mullaney's elevator in that town.

The farmers in the vicinity of Alpena, S. D., have purchased an elevator at that point, paying \$4,300 for the house.

It is reported that a farmers' elevator will be erected at Stiles and Lidgerwood, N. D., during the coming season.

The Farmers' Co-Operative Elevator Co. of Geddes, S. D., is planning to increase its elevator capacity from 20,000 to 50,000 bushels.

It is reported that D. L. Lytle has disposed of his elevators at Beach and Dickinson, N. D., and will build a new house at Miles City, Mont.

The Brampton Farmers' Elevator Co. of Brampton, N. D., has been incorporated with \$25,000 capital stock by George H. Riggan and others.

The Alfred Farmers' Elevator Co. of Alfred, N. D., has been incorporated with \$8,000 capital stock by Wm. Frazin, Chas. F. Weatherly and David W. Barr.

A farmers' elevator company has been organized at Cogswell, N. D., with G. H. Noyes as president and Richard McCarten as secretary. The company is considering a proposition to buy one of the old line houses in Cogswell.

H. R. and A. P. Hasvold have organized the Hasvold Grain Co. of Aberdeen, S. D. The new company will at once commence the erection of two new 40,000-bushel elevators, one at Richmond, S. D., and one at Mina, S. D. The houses will be built on a cement base, with steel pits, and equipped

with automatic scales and all of the newest type of machinery.

The farmers in the vicinity of Duane, N. D., have organized an elevator company. George Rose has been chosen president and Frank Letson secretary.

The recently organized Farmers' Elevator Co. at Vienna, S. D., is attempting to secure an elevator in that town. Failing in this a new house will be built.

The Atlas Elevator Co. has purchased the interest of M. W. Murphy in the elevator at Watertown, S. D., and is now sole owner of the property and business.

Farmers in the vicinity of Plankinton, S. D., have organized a co-operative elevator company. H. G. Piuney is president of the company and J. C. Barrett secretary.

The Truax Elevator at Burbank, S. D., has again changed hands. A farmers' company has acquired it, and the house will hereafter be known as the Farmers' Elevator.

Michael Maher, Herman Kleinschmidt and A. B. Peterson have incorporated the Farmers' Co-Operative Grain and Mercantile Co. of Lisbon, N. D., with \$50,000 capital stock.

M. E. Johnson, Joseph Trottier, Philip Tessier and others have incorporated the Farmers' Elevator Co. of Horace, N. D., with \$10,000 capital stock. An elevator will be erected.

W. A. Scott and E. B. Douglas, who recently purchased the La Moure Flour Mill at La Moure, N. D., have let the contract for a 45,000-bushel elevator to be built adjacent to the mill.

The Upham Farmers' Elevator Co. of Upham, N. D., has been incorporated with a capital stock of \$10,000. The incorporators are B. T. Benson, J. P. Ebersole, Ingeman Sinette and others.

Farmers' elevator companies are in prospect at the following places: Wentworth, Gettysburg, Wetonka, Brainard and Hecla, S. D., and Mott, Durbin, Blaisdell, Minto and Jackle, N. D.

The new farmers' company at Anamosa, N. D., has acquired an elevator site in that town and will erect a 40,000-bushel elevator, equipped with gasoline engine, cleaner and scales. John Birtel has been chosen manager.

The Ostroot Elevator Co. of Lake Preston, S. D., has closed a contract with the Younglove Construction Co. of Sioux City, Iowa, for the construction of two elevators, a 25,000-bushel house at St. Lawrence, S. D., and a 30,000-bushel house at Wessington, S. D.

The Edinburg Farmers' Elevator Co. has incorporated with \$50,000 capital stock at Edinburg, N. D. The incorporators are Ole Fauskee, A. N. Brunsvoold, K. Christopherson and others. The company has purchased the Folsom & Rustan Elevator at Edinburg, and will take possession May 1, with A. O. Torgerson as manager.

SOUTHERN AND SOUTHWESTERN.

The Peavey Grain Co. has opened up a southern office at Port Arthur, Texas.

M. Green is planning the erection of a 25,000-bushel elevator at Hydro, Okla.

H. J. Hauck & Co. will rebuild the rice elevator recently burned at Simms, Texas.

The new elevator of the Madill Milling and Elevator Co. at Madill, Okla., has been completed.

Chowning & Son of Oklahoma City, Okla., are planning the erection of an elevator at Davis, Okla.

The new four-story warehouse of the National Grain, Hay and Storage Co. at Macon, Ga., is now in the course of erection.

The Alexandria Milling and Elevator Co. has awarded the contract for the erection of a grain elevator at Alexandria, La.

J. I. Triplett is planning to establish a grain elevator at Woodstock, Va., in connection with the flour mill he will erect at the same place.

The Mathews-Linton Grain Co. of Chickasha, Okla., has been incorporated with \$10,000 capital stock by W. L. Mathews, F. R. Linton and Z. W. Mathews.

Moore Bros. of Pocasset, Okla., are planning to remove to Chickasha, Okla., where they will erect a 75,000-bushel elevator. Work will be commenced next month.

T. J. Holdridge of Kingman, Kan., has disposed of his interest in the Pond Creek Mill and Elevator Co. at Pond Creek, Okla., to the other stockholders in the concern.

The Farmers' Mill and Grain Co. of Fayette County, Tenn., has been incorporated with \$5,000 capital stock by F. P. Kyle, E. H. Irwin, E. G. Griffin and others.

The recently incorporated Crozier Grain Co. is erecting a new elevator at Nashville, Tenn. In addition to this new house, two other Nashville elevators are being remodeled. Alexander C. Harsh is increasing the capacity of his house in South Nashville, installing automatic scales, and the Steel

Elevator and Storage Co. is building an addition to its present plant in West Nashville.

The Turner Grain Co. of Texarkana, Ark., has been incorporated with \$25,000 capital stock by Q. O. Turner, James T. Trigg and L. B. Estes.

The Piedmont Mills Co. have let the contract for a 75,000-bushel elevator at Lynchburg, Va. The elevator will be constructed of brick and concrete.

The Mercedes Grain Co. of Mercedes, Texas, has been incorporated with \$10,000 capital stock by James Abelas, Clifford Abelas and J. D. Abelas.

G. E. Parkhill, T. G. Shaffer, O. M. Murray, A. J. Lawrie and J. F. Jerome have incorporated the Chattanooga Elevator Co. of Chattanooga, Okla., with \$8,000 capital stock. An elevator will be erected.

The Nashville Farmers' Grain and Elevator Co. of Nashville, Okla., has been incorporated with \$8,000 capital stock. J. A. Robbins is president of the company, with J. J. Gibson secretary and Ira S. Winehart manager.

MISSOURI, KANSAS AND NEBRASKA.

There is talk of a farmers' elevator company at Homer, Neb.

A new elevator is in the course of erection at West Side, Kan.

Work is progressing rapidly on the new Hilt Elevator at Bern, Kan.

The new Cardwell Elevator at Perry, Kan., is nearly completed.

Woodford Bros. have disposed of their grain business at Burlington, Kan.

F. W. Lowe has purchased the elevator of the State Grain Co. at Mahaska, Neb.

W. H. Kelly of Edgerton, Kan., contemplates building a 20,000-bushel elevator.

The Updike Elevator at Niobrara, Neb., has been sold to Seth Jones of Winneton, Neb.

R. D. Carpenter & Co. have purchased the business of F. D. Quinby & Co. at Hartford, Kan.

The farmers about Winside, Neb., are thinking of either buying or building an elevator at that point.

It is reported that Jones & Borah of Grinnell, Kan., will erect a 20,000-bushel elevator at Collyer, Kan.

The Updike Grain Co. has purchased a Hall Signaling Grain Distributor for its elevator at Petersburg, Neb.

A. G. Burress has leased the 10,000-bushel elevator of J. H. Gregg at Belvidere, Neb., and is conducting it.

R. R. Chenoweth has sold the West Elevator at Ohiowa, Neb., to the Lincoln Grain Co., which has taken possession.

William E. Robertson has purchased the grain elevator and flouring mill at Morrill, Kan., and will operate the plant.

Samuel Bittenbender has sold his interest in the elevator at Ponca, Neb., to John McQuillen, who will take possession May 1.

The Shady Bend (Kan.) Mill and Elevator Co. has opened up a branch at Lincoln, Kan., and placed G. R. Anderson in charge.

The Barston Elevator at Western, Neb., owned by Lincoln, Neb., capitalists, has been torn down, and a new house is to be erected on the site.

Urie & Teakon have secured a site upon the railroad right of way at Carbondale, Kan., and will at once commence the erection of an elevator.

The Farmers' Grain Association of Benedict, Neb., has purchased two Hall Signaling Grain Distributors of the Hall Distributing Co., Omaha, Neb.

Gibbon & Reid, who have succeeded the Burlington Roller Mills at Burlington, Kan., have recently completed a 15,000-bushel elevator on the old mill site.

The Haufman-Boyle Grain Co. is considering the erection of a new elevator at Wichita, Kan. Other parties are said to be figuring on a second new house.

Edward Phillips has purchased an interest in the grain business of N. E. Hawk at Effingham, Kan., and the firm will hereafter be known as Hawk & Phillips.

The Morris County Grain Co., with headquarters at Council Grove, Kan., has succeeded F. B. Quinby & Co. This concern owns and operates a 20,000-bushel elevator on the M. P. and M. K. & T. Railways.

The Gooch Milling Co. has begun work on a new 100,000-bushel elevator adjoining its mill at Lincoln, Neb. The elevator will consist of a 4,000-bushel working house and a series of 12,000-bushel concrete and steel storage tanks.

The Red Star Milling Co. of Wichita, Kan., is planning to erect a new storage elevator which will more than double its storage capacity. The new house will be erected adjacent to the present elevator and will give the company a total storage capac-

ity of about 200,000 bushels. The building will be completed in time to handle the new crop.

W. H. Roberts of Savonberg, Kan., has purchased the elevator at Stark, Kan., of T. E. Henson and will operate same in connection with the plant at Savonberg.

I. E. Clark has purchased the elevator on the M. K. & T. Ry. at Walnut, Kan., formerly owned by Benedict & Co., and will make some repairs in the near future.

A site has been secured for the new farmers' elevator which will be erected shortly at Hadar, Neb. G. F. Lierman is president of the company, with Albert Mueller secretary.

Nelson Bros. of York, Neb., recently transferred to the Foster Grain Co. of Lincoln, Neb., their six elevators located at Stromsburg, York, Mapps, Knox, McCool Junction and Lushton.

The Kingman Milling Co. will shortly commence work on the erection of three steel storage tanks at the plant at Kingman, Kan. The tanks will have a combined capacity of 100,000 bushels.

A number of farmers in the vicinity of Brock, Neb., have incorporated the Farmers' Grain Co., with \$10,000 capital stock. An elevator will probably be erected at Rboe's siding, near Brock.

The Seneca Mill and Elevator Co. has disposed of its business and property at Seneca, Mo., to J. W. Shaw and other parties of St. Louis. The consideration was \$100,000. George Doran will be retained as manager of the company's elevator business.

The Erie Grain & Lumber Co. of Erie, Kan., composed of Johnston & Fanatia, have purchased the elevator at Erie formerly owned by Benedict & Co. of Chanute. They will overhaul the building, put in new machinery and be ready to handle the new crop.

The Rock Milling and Elevator Co. has started work at Hutchinson, Kan., on two large steel and concrete storage tanks, which will have a combined capacity of 100,000 bushels. The tanks will be fifty and sixty feet in height, one being used for wheat and the other for corn.

The Bowersock Mills and Power Co. will shortly commence work on a new 25,000-bushel elevator at Lawrence, Kan. The new elevator will be erected in the northern part of the town along the line of the Union Pacific, and will be constructed entirely of cement. The house will be equipped with a large power shovel.

The farmers of Merrick County, Neb., have formed an association for the marketing of live-stock and general produce. The organizers are talking of erecting a string of five or six at different points in the county, with a large central cleaning elevator at Central City. Oscar Booth has been chosen secretary of the association. The committee in charge of the elevator proposition is composed of James Stephen, Herman Milhofer and Otto May.

EASTERN.

The American Warehouse and Trading Co. has completed its new ten-story grain warehouse at Hoboken, N. J.

C. H. MacDonald, R. Dawson and G. H. Blake have incorporated the Consolidated Hay & Grain Co. of Passaic, N. J. The capital stock is placed at \$50,000.

William J. McMullin has purchased an old school building in Philadelphia, Pa., which he will demolish to make way for a large grain warehouse. The site measures 100 by 121 feet.

The Spencer Grain Co. of Waterbury, Conn., has been incorporated with \$30,000 capital stock by Irvin A. Spencer, Charles H. Davis, Merrill D. Leonard, Dennis E. Carroll and Daniel Dunden.

The Arthur Grain & Coal Co. of Lowville, N. Y., has been incorporated with a capital stock of \$40,000. The incorporators are Eugene Arthur, O. K. Arthur, F. L. Tedmon, M. A. Maher and M. W. Holt.

The executors of the Bennett estate have leased the Bennett Elevator at Buffalo, N. Y., to the Ryan Elevator and Forwarding Co. The house has a storage capacity of 800,000 bushels and can handle 20,000 bushels per hour.

The new elevator of E. Crosby & Co., at Brattleboro, Vt., has been put in active operation. The house is fully equipped with power shovels, automatic weigher and cleaners. Later a grinder and corn cracker may be installed.

Theodore R. Van Zandt, Edward V. H. Voorhies and A. G. Van Zandt have incorporated the Van Zandt & Voorhies Corporation of Plainfield, N. J. The corporation is capitalized at \$50,000 and will deal in grain, feed and flour.

The old Terry elevator at Bridgeport, Conn., built over 25 years ago, is being torn down by the New Haven road, upon whose land it stands. The old elevator was a Bridgeport landmark. The ground lease expired a short time ago, and the rail-

road decided to tear the house down on account of the fire danger from it to its other water front property.

CANADIAN.

The Camrose Lumber & Grain Co. of Camrose, Alberta, has sold out its lumber business.

The Saskatchewan Western Elevator Co., Ltd., has decided to erect an elevator at Tugaske, Sask., and will commence operations within a short time.

It is reported that the Atlas Elevator Co. of Winnipeg, Man., will erect ten elevators along the line of the Grand Trunk Pacific during the coming season.

J. C. White of Duluth, Minn., has purchased 400 feet of water frontage on the Fraser River at Eburne, B. C., and will erect a large elevator on the property.

The Farmers' Elevator Co. of Melita, Man., is planning to build a new 30,000-bushel elevator alongside its present house, which has a capacity of 25,000 bushels.

There are reported two openings for grain elevators at Elfros and Candahar, Sask. R. H. Kerr, of Quill Lake, Sask., can give information concerning both locations.

Excavation work is nearly completed for the new 3,000,000-bushel elevator which the Canadian Stewart Co. is erecting for the Grand Trunk Pacific on Mission River, Fort William.

The Western Elevator Co. is building a 600,000-bushel grain elevator at Fort William, Ont. It will embrace a steel working house and tile storage and be finished by fall. The Barnett & McQueen Co. has the contract.

J. T. Dalrymple, assistant freight traffic manager of the Grand Trunk Pacific, who recently returned from an extensive trip over the road, declares that between thirty and thirty-five new elevators will be under construction along the G. T. P. line within the next few weeks.

Barnett & McQueen Co., Ltd., of Fort William, Ont., have the contract for a 1,000,000-bushel elevator for the Thunder Bay Elevator Co. at Port Arthur, Ont. It will consist of concrete storage tanks and working house of wood, and will be completed for the fall crop of grain.

The Alberta Grain Co., which operates fourteen elevators in different parts of the province, has decided to move its main office from Strathcona to Calgary. The Alberta Grain Co., which absorbed the Dominion Elevator Co. some time ago, is allied with the Northern Elevator Co. of Manitoba. The removal of the main office to Calgary will give the company a more central location, and better command of the provincial grain situation.

WESTERN.

It is reported that a new elevator will be erected at Moore, Mont.

Melrose & Krull have succeeded Melrose & McCausland, grain dealers at Puyallup, Wash.

It is reported that a large grain warehouse will be erected at Big Timber, Mont., during the coming season.

The David Robbins Grain Co. is planning to erect a \$10,000 steel and cement grain elevator at Salt Lake City, Utah.

Minneapolis parties have purchased a site at Clyde Park, Mont., and will erect a grain elevator. There is also talk of a flouring mill.

The Rexburg Milling Co. of Rexburg, Idaho, contemplates the erection of a grain elevator at that point, to be ready for the fall business.

Henry Schodie has let the contract for a new elevator and flour mill to be built at Heyburn, Idaho. Work will commence as soon as possible.

The L. M. Hunt Grain Co. has been incorporated at Colorado Springs, Colo., with a capital stock of \$25,000 by L. M. Hunt, H. A. Robinson and P. Robinson.

The Farmers' Union Elevator and Warehouse Co. of Spangle, Wash., has been incorporated with \$10,000 capital stock by H. W. Green, H. E. Hall, R. Reilly, G. L. Reid and S. J. East.

J. C. Oakes, G. W. Bolen, George J. Roschman and A. A. Weaver have incorporated the Wilson Creek Union Grain & Trading Co. of Wilson Creek, Wash., with a capital stock of \$2,500.

The Grange Co., which represents the grain and hay interests of Stanislaus County, Colo., is planning to erect two new warehouses, one at Keges, Colo., and one at Hughson. Work will be commenced this month on the houses, which will be 50x200 feet in dimensions.

A new elevator dock is to be built in Portland, Ore., during the coming season, with a view to facilitating the handling of grain. In addition to this, the Pacific Coast Elevator Co. and the Puget Sound Warehouse Co. have agreed to reduce handling charges from 75 to 50 cents per ton along the O. R. & N. and Northern Pacific branch lines. These

two facts will mean a large saving to the grain growers of that section during the coming year.

The Hawkeye Elevator Co., of Des Moines, Iowa, which erected an elevator at Red Lodge, Mont., last season, is now planning to build another elevator at Roberts, Mont., during the coming summer.

The Northern Grain and Warehouse Co. has been incorporated at Portland, Ore., with \$60,000 capital stock. The incorporators are A. Cohn, George W. McMillan and Cecil H. Bauer. The articles cover a general business in the states of Oregon, Washington, Idaho and California.

A. Cohn of Portland, Ore., Samuel Boyer of Colfax, Wash., and I. S. Woods of Tekoa, Wash., have purchased the grain interests of the Campbell-Sanford-Henley Co. north of the Snake River, and have organized a new company. Portland will be the headquarters of the new company, with Tekoa as a branch.

Farmers along the Spokane & Inland Electric Railway, which runs eastward to Moscow, Idaho, have leased from the railway company all of the grain warehouses along the line except those at Steptoe and Blackwell. Among those taken over are the large houses at Cashup, Thornton, Moscow, Colfax and Southerland.

J. W. Raymond of Spokane, superintendent in Eastern Washington and Idaho for the Puget Sound Warehouse Co. and the Everett Grain and Warehousing Co., announced a reduction of 25 cents a ton for handling wheat will be made by these concerns, beginning June 1. The charge was 50 cents a ton until two years ago, afterward it was increased to 75 cents. No reason is given by Mr. Raymond except that he has received instructions to do so from the headquarters of the companies at Tacoma. The Pacific Coast Elevator Co., which is owned by the same interests, will probably make the same reduction. The Puget Sound and Everett grain companies own and operate one hundred and thirty warehouses in Washington, Oregon and Idaho, fifty-three of which are under the charge of Mr. Raymond. The Pacific Coast Elevator Co. has about the same number of houses. The approximate amount of wheat handled yearly by the Puget Sound and Everett grain companies is between 5,500,000 and 7,000,000 bushels.

CORN IN SOUTH RUSSIA.

Special Agent R. R. Dennis makes the following report on the extending interest being taken in corn raising in south Russia, which will create additional markets for American implements, and calls attention to the opening there for an American corn-growing specialist at a good salary:

"The uncertainty of grain crops in south Russia, and the success which has attended the corn crop, even under adverse meteorological conditions, has attracted the careful attention of the authorities in several of the provincial governments located in the corn belt adjacent to the Black Sea. In the government of Bessarabia, situated west of Odessa, W. I. Bogdan, president of the Government Agricultural Society, having taken the matter in hand, has succeeded in having an appropriation made authorizing an expenditure of 10,000 rubles (\$5,150) per year for the purpose of practically and scientifically demonstrating the possibilities of corn as a profitable crop for the south Russian farmers. It is conservatively estimated that there are 29,000,000 acres of land in this section on which corn can be grown.

"Mr. Bogdan purposes establishing an experimental station at some convenient accessible point in his province, intending to supply this station with all of the latest improved implements for planting, cultivating, harvesting, shelling and shredding. To insure the complete success of the experiment, he desires to secure the services of some highly educated and thoroughly practical agriculturist from the United States to take entire charge of the station. The society is prepared to pay such a man \$4,000 per year and to furnish gratis a comfortable house for him to reside in. Furthermore, the society will make a contract for a term of years and promises all assistance needed in the way of hand or horse labor. A man of mature years is wanted and preferably a married man, as being more likely to be happy and contented under the different conditions existing between life in Russia and the United States. The person selected would also be expected to be well posted, theoretically if not practically, as to the profitable utilization of a corn crop."

"It is Mr. Bogdan's intention to urge upon the minister of agriculture at St. Petersburg the securing of a special edict permitting the free importation of all implements used in corn cultivation. Corn harvesters are already on the free list. Mr. Bogdan has applied for assistance in this matter to C. J. Meyer, manager of the Odessa office of the International Harvester Company."

The Soo Line is laying new lines and will soon be able to carry grain to Duluth-Superior, using the Wisconsin Central terminals.

THE EXCHANGES

Henry Towner, the oldest living member of the Chicago Board of Trade has sold his membership, which he has held continuously since 1857. Ill health has compelled Mr. Towner to retire.

The Toronto Board of Trade has arranged with Beaty & Glassco for full and direct wire service on grain from the following exchanges: Chicago, Minneapolis, Duluth, Kansas City, New York, Winnipeg and Liverpool.

The annual sale of telephone privileges on the Chicago Board of Trade, which took place recently, netted premiums of only \$3,175, as against \$8,000 a year ago. The highest prices paid were \$600 each for four outside telephones.

The annual sale of the grain and flour tables on the Baltimore Chamber of Commerce on April 5 netted \$520, against \$582 a year ago, with twelve tables still unsold. The largest premium paid in addition to the fixed rental, was \$11 per table.

Winnipeg is agitating the establishment of a sample wheat market, and recently sent A. M. Blackburn of the Grain Growers' Association, to Minneapolis for the purpose of studying the methods employed in conducting the sample market in that city.

The Board of Directors of the Minneapolis Chamber of Commerce passed a resolution on March 25 protesting against the proposed reduction in the duty on barley from 30 to 15 cents a bushel. The Chicago and Milwaukee exchanges have passed similar resolutions.

The Nashville Grain Exchange has inaugurated a grain pit and a call board. Under the stimulus of these improvements, trading on the Exchange has materially increased. Direct wires with all the principal markets are now in operation. The call hour has been set from 12:30 to 1 o'clock.

The directors of the Minneapolis Chamber of Commerce have announced that in all sales made to arrive the tender shall be from country stocks, and shall be grain not previously inspected. Under this ruling the buyer cannot be compelled to take grain loaded out of terminal elevators at Duluth, Superior or other terminal points.

During the past month The American Elevator and Grain Trade has received the annual reports of the St. Louis Merchants' Exchange, New Orleans Board of Trade and Omaha Grain Exchange. The editor wishes to thank Messrs. George H. Morgan, H. S. Herring and E. J. McVann, secretaries of the respective exchanges, for this courtesy extended.

Secretary George F. Stone of the Chicago Board of Trade reports the following membership for the Board during March: New members—E. E. Matchette, J. J. Lynch, J. W. Radford, S. J. Harman, W. J. Hamilton, P. J. Brennan, D. A. Baker, F. W. Thomas; memberships transferred—Chas. C. Orthwein, S. J. Scott, W. J. Pope, C. O. Collier, H. A. Towner, Cameron Currie, Geo. O. Lamprecht, J. J. McDermid.

Secretary George H. Morgan of the St. Louis Merchants' Exchange reports the following applicants for membership during the month of March: William Pollock, Mexico, Mo.; Edgar S. Nicolai, St. Louis; Orville E. Babcock, Chicago, and D. D. Cummings and Frank H. Servatius of St. Louis. The applicants above mentioned will take over the memberships of George R. Collett, Charles C. Rubius, E. Kerrigan, F. F. Howard and W. E. Hereld.

[Special Correspondence.]

NEWS FROM TOLEDO AND OHIO.

BY H. L. SPOHN.

At the present time there seems to be a very fair prospect for some squeezing in May wheat deliveries in this market. While it is a little early yet to analyze the situation definitely, it is certain that there is more or less uneasiness in some quarters and that several speculators are on the anxious seat. The fact is that there is very little available wheat here, and cash wheat has been soaring around several cents above May for some time. Farmers are selling very little, and it is estimated that they have very little to sell. The Ohio April crop report received here on the 6th is decidedly bullish, showing wheat conditions 62 as compared with 85 a year ago. It is estimated that the amount of wheat now in first hands is only 3,600,000 bushels as against 5,800,000 a year ago. In addition to the fact that the acreage was nearly 25 per cent short, original reports from all over the state show that many fields will be plowed up and planted to corn because of damage to the growing crop from winter-kill. Grain in store in Toledo at the present time shows the following: Wheat 292,916 bushels; corn, 135,749 bushels; oats, 110,141 bushels. The receipts on all kinds of grain except clover seed have been very light recently, due largely to the fact that the high offerings have induced farmers to sell liberally and they now have but little left to market. While all grain export trade has been an impossibility for some time,

there has been a fairly active domestic business and a ready call from the Eastern markets for everything that could be gathered up here. If climatic conditions are favorable, Ohio will raise the heaviest corn crop on record this season, as every available fraction of an acre will be planted this spring. Conditions thus far have been very favorable, and indications point to earlier planting than usual. While last year's crop was a large one, corn receipts here at the present time are lower than usual, owing to the denuding of farmers' cribs by the fancy prices offered for Ohio corn earlier in the season.

Frank I. King, of C. A. King & Co., has tendered his resignation as a member of the Board of City Sinking Fund Trustees. He has held the office since January, 1907, and resigns to devote more time to his private business interests. Mr. King has also resigned as trustee from several other public boards, including the Chamber of Commerce.

Toledo grain dealers are especially interested in the suspension of the firm of John Dickinson & Co., that concern having a branch office in this city. H. O. Barnhouse, the local representative of the company, makes a statement to the effect that the company will meet all its obligations in full and that no embarrassment to customers will result. Several local firms have had extensive business relations with the entangled concern.

An agricultural special corn train was recently run over the C. H. & D. Railroad carrying a corps of agricultural experts who addressed large crowds of farmers congregated at the various stops upon topics of interest. The enterprise proved highly successful and a similar excursion will be run over the Wabash lines in the near future.

A new concern to be known as the Berkley Elevator Co., was recently incorporated with a capital stock of \$20,000 by E. F. Ford, F. E. Sharpe, M. Sochibbler, D. A. Lathrop, George Atwell and D. D. Washburn. The company will operate an elevator at Berkley, Ohio.

A new industry styled the Bellefontaine Feed & Fuel Co. will be launched at Bellefontaine, O., on June 1 with C. H. Tingley of Columbus as president and general manager. The concern will erect a building in the near future.

The 70,000-bushel cargo of wheat which has laid in the Toledo harbor all winter has been sold to local parties and will be unloaded at the plant of the National Milling Co.

Fire broke out on April 6 in the Bushman grist mill at Pemberville, O. Prompt work by the fire department saved the structure and reduced the damage to a minimum.

The directors of the Agricultural Society have determined to make the Lucas County Fair at Toledo this year one of the best in Ohio, so far as grain exhibits are concerned. Grain Inspector Culver of the Toledo Produce Exchange will have charge of the awarding of the money prizes for the best displays of grain. It is probable that about \$2,500 will be distributed in this manner.

The State Agricultural Board, after a visit to the site, has formally accepted the offer of the County Commissioners to donate a portion of the Fair Grounds and will take steps to establish an experiment station at Findlay, Ohio, in the near future.

Stock subscriptions are being solicited at Tontogany, O., for a co-operative company in which a number of farmers are interesting themselves.

At a recent meeting in Napoleon, O., preliminary steps were taken to organize a Henry County Agricultural Society which will hold its display jointly with the Napoleon Fair Company in September. The purpose of the organization is to encourage the display of farm products.

An interesting experiment will be undertaken at Bellefontaine, O., this summer by the Belle Center Corn Improvement Association, which has rented a farm and will have a corn "variety test." Many varieties of corn will be cultivated and the best seed for the farmer of Central Ohio thus ascertained by practical test.

The Daily Trade Bulletin gives the Liverpool Corn Trade News figures on world's exports, for the period August 1, 1908, to March 15, this year, from Argentina and Russia at nearly 9 millions more oats than the previous year; from Germany 16 millions bus. more rye than a like period the former season, and from Russia of barley 84,872,000 bushels, or more than 80% of the total from all exporting countries.

Alfred Shaw, who undertook to "corner" beans last fall at Cleveland, the other day secured a judgment for \$593 against John W. Moore. Mr. Shaw had sued F. J. Wing and Mr. Moore for wages, but the action against Way was dismissed. They had organized a company in 1896 to buy the bean elevators in western New York and Michigan, where most of the beans used in the country are kept. Options on some of the elevators were actually obtained. The corner on beans fell when several of the directors dropped out and failed to finance the project. Shaw, it is understood, was employed to help sell stock in the concern. In his petition he says that he was to receive a salary of \$200 a month.

COMMISSION

Peter Brennan, formerly of Pringle, Fitch & Rankin, Chicago, has gone with Charles Sincere & Co.

Thomas & McCormack have opened a branch office for Logan & Bryan of Chicago, at Hutchinson, Kan.

James Doran & Co., one of the oldest grain and stock brokerage firms of St. Paul, Minn., has gone out of business.

J. M. Toglesong of Lewisburg, W. Va., has established a brokerage business in hay, grain and feed at Pueblo, Colo.

Howard S. Rickerson, formerly treasurer for P. L. Lynch & Co. of New York City, has embarked in the hay, straw and grain business on his own account.

Norris & Co. of Chicago have been incorporated to deal in grain. The capital stock is \$350,000. The incorporators are James Norris, Robert Crombie, W. K. Pattison.

Keelin Bros. & Co. of Chicago, Ill., has been incorporated with a capital stock of \$5,000 to deal in grain. The incorporators are T. W. Keelin, J. J. and W. H. Keelin.

E. H. Watts, representative in South Dakota of the D. Rothschild Grain Co. of Davenport, Iowa, has removed his headquarters from Watertown, S. D., to Sioux Falls.

T. M. Thomas of Kansas City has opened an office in the Sedgwick Block at Wichita, Kan., for Gordon & Matthews, a branch of the firm of Logan & Bryan of Chicago.

Frank J. Magin, formerly with John Dickinson & Co., has associated himself with L. J. Schwabacher & Co., and will have charge of their grain and stock department which they expect to open soon.

The Fort Smith Grain & Produce Co. of Fort Smith, Ark., has been incorporated with a capital stock of \$25,000. The incorporators are C. W. Giren, president; H. F. Payne, A. H. Ritter and T. L. Green.

The stockholders in the recently incorporated Days-Kaumeier Grain Co. of Detroit, Mich., are C. H. Kaumeier, Albert F. Kaumeier and Robert H. Day. The company has offices in the Chamber of Commerce Building.

C. F. Arnold, formerly with the Missouri & Kansas Grain Co. as Southern representative, and who started into business for himself at Neosho, Mo., last October, reports that he has done an excellent business from the very first.

The firm of J. E. Soper & Co. of Boston, Mass., has been incorporated as the J. E. Soper Co. The business is being carried forward at 206 Chamber of Commerce under the same management of Henry B. Moore, president; Walter E. Smith, vice-president; Edward A. Shepherd, treasurer.

H. J. Nickel has purchased the office outfit of F. G. Olson Grain Co. at Wichita, Kan., and has opened a grain office there. Mr. Nickel has been with the Olson Company for some time and is an experienced grain man. He will conduct the business under the name of the National Grain & Flour Co.

The firm of Picker & Beardsley of St. Louis, Mo., has been incorporated with a paid up capital of \$40,000. The offices of the company are Chas. F. Beardsley, president, Erich Picker, vice-president and treasurer, and G. H. Nagel, secretary. The company succeeds Picker & Beardsley, one of the older and best known firms on the St. Louis broad and has offices at 116-118 North Main street.

It is announced that Robert Pringle will withdraw from the firm of Pringle, Fitch & Rankin on May 1, and the remaining partners will carry on the business under the firm name of Walter Fitch & Co., at the old office, No. 1 Board of Trade, Chicago. The members of the firm are Walter Fitch, William D. Card, T. W. Browning and Leeds Mitchell. Mr. Pringle has extensive timber, ranch, mining and other interests in the Northwest and will devote his attention to these in the future.

Harry R. Sawyer, who for the past four years has been traveling representative and auditor for Bartlett, Patten & Co., has resigned his position with that house and enlisted with the grain commission firm of J. H. Dole & Co., of 226 La Salle street, Chicago. Mr. Sawyer is well known to the grain trade of Illinois and Iowa and during the past winter was located in Decatur and handled the central Illinois business for Bartlett, Patten & Co. from that point and with his new firm will travel in Illinois exclusively.

John Dickinson & Co., one of the well known grain and stock firms of Chicago and New York, suspended business early in April and later a receiver was appointed. The failure is said to involve about \$250,000. The affairs of the company were left in a very tangled condition as Mr. Dickinson left Chicago immediately after the failure and up to April 10 had not returned. The American Trust & Savings Bank, the receiver, was besieged by demands in person, by mail and by telegraph

from Dickinson's customers for money due them from amounts in Dickinson's hands, but no distribution will be made until the amounts are definitely footed and a court order has been given to pay a dividend.

[Special Correspondence.]

ST. LOUIS FLOUR AND GRAIN NOTES.

BY L. C. BREED.

During the past month interest in the measure now before the legislature relative to weights and inspection has been growing apace. Not long ago, Representative Miller of St. Louis introduced a bill which takes a slap at the grain inspection department of the Railroad and Warehouse Commission, by providing that no person shall be appointed by the Chief Deputy Grain Inspector or Railroad Commissioners to a position in the grain inspection department who does not know the difference between wheat and corn! Mr. Miller claims there are such inspectors and deputies now in the employ of the board!

Besides the opposition to the bill on the part of the exchanges of St. Louis, Kansas City and St. Joseph, the grain men of adjacent states are greatly dissatisfied. At a recent meeting at St. Louis, Geo. A. Wells, secretary of the Iowa Grain Dealers' Association, E. J. Smiley, secretary of the Kansas Grain Dealers' Association, and C. F. Prouty, secretary of the Oklahoma Grain Dealers' Association, were emphatic in their protests against any state supervision of weights, and charge gross neglect on the part of state officials. They state, furthermore, that St. Louis and Kansas City are liable to lose 90 per cent of their grain shipments if the bill placing the weighing in the hands of the state should go through instead of the one giving full control to the boards of trade.

Delegations from the exchanges of St. Louis and Kansas City have appeared before the house committee on agriculture in opposition to the bill empowering the Railroad and Warehouse Commissioners to inspect grain in private elevators in St. Louis, Kansas City and St. Joseph, over which they now have no control. This is in effect a revival of a bill which was passed through the last legislature and which was declared void by the Supreme Court.

The Eads bill, empowering the Governor to appoint grain inspectors, was defeated in the Senate.

The portrait of President Taft presented by himself to the St. Louis Millers' Club was unveiled at the annual meeting of that organization held at the Mercantile Club.

At the recent city election, Charles Espenschied, a retired merchant miller and a prominent member of the Merchants' Exchange, was elected a member of the City Council.

On the appearance in charge of Turner B. Morton, who is associated with the grain commission firm of Morton & Company, on his return from Louisiana, Mo., where he had married Miss Hilma MacBride, he was surrounded by members and deluged with wheat, congratulated, pummeled and otherwise made to understand how fully his associates appreciated his happiness and good fortune.

The ornate balustrade of turned walnut which has long surrounded the reporters' box at the wheat pit of the St. Louis Merchants' Exchange was recently replaced with a close fence, owing to the complaint of the market reporter and the telegraph operator who occupy the box that the openings between the balusters gave the pit traders too easy an opportunity to play practical jokes. One of these tricks consisted in sticking wisps of lighted paper between the balusters and under the seats of these employes of the Exchange, and this attention they failed to enjoy.

The Cochrane Grain Company is now operating the elevator on Theresa Avenue and Wabash Railroad, known as the Exchange Elevator. The elevator has been thoroughly overhauled and equipped with sacking and cleaning machinery of modern pattern for rapid handling of grain. The capacity of the elevator is 125,000 bushels and it is in charge of W. A. Withrow.

By a recent order of the board of directors of the St. Louis Exchange the members renting tables on the floor are required to clear off their samples at the close of trading hour or be subjected to a fine. In the old days some of the commission men had grain enough on top and underneath their tables to pretty nearly stock a small elevator.

Kansas City shippers propose to still further utilize the Missouri River as a transportation route between that city and St. Louis. The city officials have pledged to expend \$75,000 to improve the Missouri River levee and will erect a public warehouse. In consequence of this action, a company is being formed, with a capitalization of \$1,000,000, to navigate the river with a freight line. The scheme is a result of alleged discrimination on the part of the railroads in the matter of freight rates.

A Bureau of Publicity which is to be the "livest wire" institution within the four walls of the St. Louis Exchange is to be created and added at once by arrangements now on foot instituted by the board of directors, who will appoint seven members

to act as a board of managers. These gentlemen will be authorized to employ suitable help to carry out the plan, which, among other matters, contemplates facilitating in every way the wide dissemination of news pertaining to the St. Louis market.

The Interstate Elevator, at Illinois Avenue and Louisville & Nashville Railroad tracks, East St. Louis, operated by the Missouri Commission Company, was destroyed by fire early in the morning, April 4th. The elevator was partly filled with grain and near it were several cars loaded with grain which were also burned. The cause of the fire is unknown. No one was about the building save the watchman, who did not discover it was on fire until the blaze was well under way in the top of the structure. The elevator was built in the early nineties and had a frontage of more than 170 feet, was 67 feet deep and 80 feet high. The estimated loss is \$55,000.

FOREIGN MEASURES.

The "quarter" in England consists of:

	Lbs.
American Atlantic Coast business in all United Kingdom markets	480
Russian wheat in London.....	492
California wheat in all United Kingdom markets	500
English home-grown wheat in all United Kingdom markets	504
English and Scotch barley in all United Kingdom markets	448
Russian barley in London.....	420
Russian oats in London.....	304
Priuce Edward's Island oats in Liverpool and London	320
English and Scotch oats in all United Kingdom markets	336

Other measures in different countries are:

	Bu.
One hundred kilos wheat equal.....	3.67
One hundred kilos corn equal.....	3.93
One hundred kilos oats equal.....	6.87
One hundred kilos rye equal.....	3.93
One hundred kilos barley equal.....	4.58
One hectolitre wheat equals.....	2.83
One centner, Austria, wheat equals.....	2.05
One fanega, Argentina, wheat equals.....	1.59
One cahiz, Argentina, wheat equals.....	19.17
One chetwerk, Russian, wheat equals.....	5.92
One pood, Russian, wheat equals.....	0.60
One candy, Bengal, wheat equals.....	9.22

AS PATTEN LOOKS TO ZAHM.



He's still holding Miss May and July. At least it "looks" that way. When will he dump 'em?—Zahn & Co., April 3.



Still after scalps. Will he get more of them?

J. T. McPherson, who has been in charge of the Omaha Elevator at Cortland, Neb., for a number of years, has been appointed manager of the new Cortland Farmers' Grain & Coal Co.

HAY AND STRAW

J. C. Fisher is planning to install a 40-ton alfalfa mill at Okeene, Okla.

Sherman & Vau Duzer, hay dealers at Ulster, Pa., will dissolve partnership.

It is reported that an alfalfa mill will be shortly installed at Franklin, Neb.

The Clarkson Milling Co. of Winfield, Kan., is figuring on building an alfalfa mill.

An agitation has been started at Great Bend, Kan., for an alfalfa mill at that place.

A recent fire in the Artesian Valley Alfalfa Milling Co.'s plant at Fowler, Kan., caused a loss of \$1,500.

The hay warehouse of S. H. Simpson at Gallatin, Texas, was destroyed by fire last month with a loss of \$17,000.

Local capitalists are planning to erect an alfalfa mill at Klamath Falls, Ore., during the coming season.

J. M. Johnson of Moundridge, Kan., has purchased the old mill at Marquette, Kan., and will install an alfalfa mill.

Charles H. MacDonald, Raymond Dawson and G. Harold Blake have incorporated the Consolidated Hay and Grain Co., of Passaic, N. J.

Manager F. M. Witson of the alfalfa mill at Hartman, Colo., has purchased a tract of land at Bristol, Colo., and will erect an eighty ton mill upon it.

The request of the Kansas City Hay Dealers' Association on the railroads for the reduction of the minimum weights of hay has been granted, to take effect April 15.

Fifty farmers of Barry county, Mich., have formed the Barry County Alfalfa Club, for the purpose of experimenting with alfalfa growing in that section. M. H. Burton is president of the club. Headquarters are at Hastings, Mich.

The Colorado Alfalfa Mill Co., of Pueblo, Colo., has been incorporated with \$50,000 capital stock by A. M. Carpenter, C. Matson, George McLagan, F. E. McMillan and M. G. Launders. A \$40,000-alfalfa mill will shortly be erected at Fowler, Colo.

J. O. McMurtry and J. G. Christopher have purchased the townsite of Amity, Colo., which includes a number of residences and business. The new owners plan to install a large alfalfa meal mill, as a starter towards building up other industries at that point.

The York Alfalfa Milling Co. has been organized by local capitalists at York, Neb., and will install alfalfa grinding machinery in a building secured at North York. About \$15,000 will be expended upon the machinery, which will have a capacity of about twenty tons daily.

H. C. Thompson has sold his alfalfa milling plant at Wichita, Kan., to R. R. Shearer, O. W. Ellwood and A. R. Beecker, who will operate it under the title of the Union Alfalfa Mill and Feed Co. Mr. Thompson has retained his interests in the alfalfa mills at Whitewater and Potwin, Kan.

The new 30-ton alfalfa mill of the Garden City Milling Co., at Walla Walla, Wash., will be ready for operation by the middle of May. The mill, which will cost about \$18,000, will be four stories high and of wood. John Bachtold is president of the company. Walla Walla already has one alfalfa mill.

The alfalfa mill of the Farmers' Elevator Co. at Minneapolis, Kan., was destroyed by fire on March 31. When discovered the fire was so far under way that nothing could be done to save the property. The loss on the mill was \$5,000, fully covered by insurance. The elevator was uninjured. The mill will be rebuilt.

The Topeka Alfalfa Milling Co. of Topeka, Kan., has been reorganized. The following board of directors and officers have been elected: E. R. Taylor, president; Frank P. MacLennan, vice-president; George Dickhut, secretary-treasurer; J. C. Mohler and C. W. Merriam. The directors, who are the stockholders, are all large growers of alfalfa.

The firm of Niezer & Company of Fort Wayne, Ind., has incorporated under the name of Niezer & Company, with a capital stock of \$50,000. The new firm has taken over all the property and assets of the old concern. The company will operate the hay warehouses and grain elevators at Monroeville, Ind., and Conway, Ohio, and conduct a general hay, grain and straw business.

The Pittsburg Grain and Hay Reporter, of April 9, summarizes hay conditions on that market as follows: "There has been but very little variation in prices of hay in this market the past three or four months. We have not had any serious breaks in the prices nor has it been necessary to make any great reductions in order to affect sales. It has been a long time since the supply and demand has been so well regulated and we believe that it is due to the efforts of the Reporter in keeping the existing conditions before the shipper and quote

prices that were conservative. It is also very evident that the shippers are recognizing this fact and are not being influenced by any circular letters quoting fancy prices."

On March 17 the state of Illinois removed its embargo upon New Jersey, Maryland and Michigan. On April 2 the federal quarantine was entirely lifted from the state of New York, and from all of Pennsylvania with the exception of the borough of Glen Olden in Delaware county and certain townships in Lancaster county. Pennsylvania is now the only state which is even partially quarantined.

Creditors of the St. Louis Hay and Grain Co. of St. Louis, Mo., have asked for a receiver. The company, capitalized at \$20,000, has liabilities estimated at \$110,000, with assets of about half that amount. The creditors have appointed Manning W. Cochrane and George Powell to act in conjunction with the Central National Bank, which holds \$64,000 worth of the company's paper, to pursue inquiries into the present standing of the company.

THE FOOT AND MOUTH DISEASE.

To Dr. M. R. Grainger, a veterinarian of recognized authority, of Plymouth, Mich., belongs the honor of first discovering the outbreak of the "foot and mouth" disease among Wayne County cattle during the past fall, and his advice and co-operation was of untold value to the National and state bureaus of animal industry, in the prompt and successful stamping out of the disease. The outbreak originated near Elm, Wayne County, a few miles from Plymouth. In the face of direct contradiction by the best veterinarians of Wayne County, Dr. Grainger maintained that the cattle he was called to attend were suffering from aphous fever, and his diagnosis of the complaint was sustained by experts from Washington and Boston. Dr. Grainger's accurate diagnosis and his promptness in reporting the nature of the disease was appreciated by Secretary Wilson, Dr. A. D. Melvin, chief of the national

refuse information to those Canadian shippers of hay within the above named period, who may have lost trace of their records through fire or otherwise.—Montreal Trade Bulletin.

A LARGE ALFALFA MILL.

The alfalfa mill shown in the picture is believed to be the largest in the state of Kansas, having a daily capacity of twenty tons. It is located at El Dorado, Butler County, the latter taking second place as an "alfalfa county" only to Jewell, having 35,852 acres under this famous crop. The hay is of course fed in its natural state; but it has been found most economical to reduce it to a meal, when it is not only relished by horses, cattle and hogs, but becomes a most valuable poultry food; hence the "alfalfa mill." As a feed product, alfalfa meal approximates nearer to the ideal proportion of protein and fat than any other product; and as a portion of a scientifically compounded balanced ration it has peculiar attractions to the feeder, whether for making fat or milk or to keep working animals in good condition.

The mill illustrated is that of the El Dorado Alfalfa Milling Company of El Dorado, Kan., capitalized at \$25,000 and officered by N. F. Frazier, Jr., president; W. F. Benson, vice-president; R. E. Frazier, secretary; J. B. Adams, treasurer; F. W. Case, general manager. The plant is located in North El Dorado, and is contained in a main building 146x36 feet in size and 25 feet high to the eaves. In one end of this building is located the grinding machinery, built by the Newton Alfalfa Milling Machinery Company. Near the mill is the packer for sacking the finished product and beyond is a storage room 25x36 feet in size and 20 feet high. At the other end of the building is a storage room with capacity for 2,000 tons of hay. The hay is unloaded from the wagons into the building by two large hay forks operated on a track in the comb of the roof, by means of which a man can stand 120 feet from the mill and feed it by putting



THE LARGEST ALFALFA MILL IN KANSAS.

Bureau of Animal Industry; Dr. P. H. Mullowney of Boston, and the members of the Michigan State Live Stock Commission, of which H. H. Hinds of Stanton is president, and C. A. Tyler, Nottawa, secretary. Dr. Grainger worked in conjunction with Dr. Adolph Eichorn and Dr. C. O. Durfee of the Michigan Bureau of Animal Industry in the efficient stamping out of the plague.

Contrary to general unprofessional opinion, Dr. Grainger does not consider the disease communicable to human beings or to horses. In treating diseased cattle his hands have frequently been daubed with the saliva with no ill effect to himself.

In conducting the inspector on his first visit to the affected district, Dr. Grainger led him gradually from the mildest to the most violent cases, all of which the expert diagnosed as aphous fever, or more familiarly, "foot and mouth" disease, the last being the worst he had ever seen.

OLD HAY CLAIMANTS.

We are glad to see the decision that has been rendered by the United States Court of Claims at Washington regarding the shipments of hay from Canada to the United States during the years from 1866 to 1882, by which 10 per cent of the ad valorem duty running from 90c to \$1.50 per ton is to be refunded to Canadian shippers. It may be a difficult matter owing to the lapse of so many years, for Canadian shippers to furnish duplicate invoices; but we have no doubt that the United States government will deal in this matter in the same spirit, and with the same generosity that the British government dealt with the American government in regard to the Alabama claims. We feel that we but very feebly express the gratitude of Canadian shippers to the British Ambassador at Washington and the Canadian government for the active part they have taken in this matter in bringing about such a status, as indicated by the decision above referred to. It has established the fact that the United States Government has actually selected 10 per cent more than it is entitled to on importations of Canadian hay, and one would naturally suppose that after having had the benefit of the use of these overcharges for nearly 30 years, that the Government of the United States would not be so particular as to

the hay on a carrier running the entire length of the building and operated by power.

A corn sheller and grinder and a mixer has been added to the equipment to manufacture balanced rations or standard stock foods, of which alfalfa meal forms a part.

Other buildings are a storeroom for finished products, 36x60 feet in size and 16 feet high; an engine house, 20x20 feet in size, containing a 110-horsepower natural gas engine; the office building with the Howe Ball-bearing Wagon Scales—all covered with galvanized iron; and to these will be added immediately a hay storage building 36x120 feet in size and 20 feet high. For fire protection there is a plug in the yard the same size as a city plug and one will also be put in the main building. There is enough hose, easily accessible, to reach all the buildings.

SUMMARY OF THE HAY MARKETS.

The condition of the hay on the various markets with the week ending April 10 may be briefly summarized as follows: New York City—Market quiet, with prices irregular and strength confined wholly to first grades; Boston—Situation demoralized, with very little demand, and stocks of medium grades accumulating; Philadelphia—Supply fairly liberal, arrivals chiefly of medium and low grades, which are moving slowly; Pittsburgh—Smaller offerings, with firmer conditions. No. 1 timothy scarce; Baltimore—Market firm, daily receipts cleaned up under active demand; New Orleans—Receipts light on all roads except Texas & Pacific, large accumulated stock of low grades and notable absence of good clear timothy, for which there is good demand, embargo on Illinois Central has been raised; Nashville—Slightly improved conditions, local stocks small, Southeastern and Carolina demand light; Cincinnati—Conditions favorable, receipts light, insufficient for local consumptive demand; Chicago—Receipts small with dull market except for demands for choice upland, which is scarce, other demand dull; Minneapolis and St. Paul—Arrivals moderate, with demand for better grades active, liberal arrivals of loose hay keeping prices down; Kansas City—Trading lifeless, with steady prices on better grades, warehouses full, further arrivals will unsettle markets.

IN THE COURTS

J. Schwab, as trustee for creditors has brought action at Sacramento, Cal., against the Moseley-Breese Co., for \$6,806.25, alleged to be due for grain sold defendants. It is further asked that a receiver be appointed.

As an outcome of the bankruptcy proceedings started at McPherson, Kan., against the Christie Grain Co. of Kansas City, Mo., a proceeding to adjudicate the company an involuntary bankrupt was recently brought before Judge John C. Pollock in the U. S. District Court in Kansas City, Kan. The affairs of the company are now in the hands of Receiver W. M. Whitelaw.

Attorneys for H. Gund & Co., of Hastings, Neb., operating a line of elevators along the Burlington between Nebraska City and Holdrege, recently appeared before Special Examiner George N. Brown of the Interstate Commerce Commission at Omaha, and submitted evidence to prove that the railroad has discriminated against them in favor of the Duff Grain Co. of Nebraska City. Briefs will later be filed by both complainants and defendants.

The United States Court of Appeals at St. Louis has affirmed the fine imposed by the District Court of Minnesota upon the Wisconsin Central Railroad and two of its freight agents recently to the full amount of \$20,000. The railroad claimed that the allowances in question were for the transference of wheat and did not constitute a rebate. The court finds, however, that the railroad company did not in its schedules, hold out any such offer to the grain companies, and that the payment for service did amount to a rebate.

The first testing of the validity of the Minnesota reciprocal demurrage act has resulted in the upholding of the law. In the case of the Hardwick Farmers' Elevator Co. against the C. R. I. & P. Ry. on trial at Luverne, Minn., the jury returned a verdict in favor of the plaintiff, fixing damages at \$218, the full amount asked, and attorney's fees. The suit was to collect damages for failure to furnish cars demanded in writing by the Elevator Company in the fall of 1907, and was brought under the reciprocal demurrage law enacted by the Minnesota Legislature in 1907. The railroad company contended that the law is unconstitutional in that it is an attempt on the part of the state to regulate interstate traffic, all of the cars demanded being for interstate shipments; and also, that owing to the congested condition of traffic in the fall of 1907 it was absolutely impossible for the company to furnish the cars. The railroad company will appeal.

Judge O'Doherty has ruled in favor of the plaintiff in the suit brought at Louisville, Ky., against Heitinger & Huck, proprietors of the Union Brewery, by the Davenport Malt and Grain Co. The plaintiff company sued to collect for malt furnished the defendant on a contract, and had previously recovered a judgment of something over \$800. The contract provided that the plaintiff should supply the defendant with 6,000 bushels of malt during a certain time at 61 cents a bushel, and that the plaintiff should furnish an additional 2,000 bushels of malt at the same price, "if needed." The 6,000 bushels were supplied and 1,244 bushels of that upon which the option had been given. During the life of the contract the price of malt jumped from 61 cents to \$1.20, and the defendant attempted to force the plaintiff to deliver the remaining 756 bushels. This the plaintiff refused to do, holding that it was not "needed." The original suit of the plaintiff was followed by a counter claim of the defendants asking damages for failure to deliver the 756 bushels. The plaintiff's reply claimed that the defendants did not need the malt but wanted it only for purposes of speculation. About \$700 is involved in the latest phase of the suit.

The jury in the case of Danner & Co. of Astoria, Ill., against the commission firm of Ware & Leland of Chicago, tried in the Municipal Court of Chicago, decided that the defendants were not responsible for the financial difficulties of their brokerage correspondents. Suit was brought by Danner & Co. for \$10,000, which the plaintiff held was due from Cassidy & Gray, brokers with offices in Quincy, Astoria, Galesburg, Peoria, Ill., and other points, whose transactions were handled on the Board of Trade by Ware & Leland. Cassidy & Gray failed in May of last year, and the suit was founded upon the allegation that they were in fact really agents for the Chicago firm, and that the general method followed by central commission houses in handling the trades of numerous correspondents in smaller centers was but a way of reaching out for business that otherwise would flow in other channels. Attorneys for the defense held that inasmuch as Ware & Leland had no control over the affairs of Cassidy & Gray, and executed the orders on commission only, it would be unconscionable to hold the concern responsible for the debts of its correspondent. It was shown that the Chicago house had no dealings with the customers of the Quincy concern.

COURT DECISIONS

[Prepared especially for the "American Elevator and Grain Trade" by J. L. Rosenberger, LL.B., of the Chicago Bar.]

Damages for Failure to Furnish Cars to Ship Hay.

On the appeal of St. Louis Southwestern Railway Co. vs. Leder Bros. (112 Southwestern Reporter, 744) the Supreme Court of Arkansas says that the Railway Company endeavored to have the trial court instruct the jury that if the plaintiffs could have procured cars in January and February to ship their hay, and the market had not depreciated, or was as good as in December, no recovery other than for nominal damages could be had for the hay which was sold before the market price fell.

The court properly refused to give this instruction. This theory would require the shipper to await the turn of the market to find out whether the Railway Company had injured him by failing to furnish him cars. If there should be a rise in the market in the price of the commodity he was offering, he would be benefited by the refusal of the Railway Company to furnish him cars. If the market price fell, he would be more greatly damaged than had he sold at the price obtaining at the time of the refusal. If he continued to hold his commodity and the price went down, the Railway Company could well have contended, in a suit claiming the difference in price when the goods were offered and that to which it had fallen later, that they were only liable for the price that prevailed at the time they failed to furnish him with cars.

In this case the business necessities of the parties required them to sell the hay at the price prevailing in the locality, instead of getting a better price elsewhere, which they would have received had they been able to ship to the desired market. That difference was the true measure of damages.

Nor does the court think there was error in a ruling against the Railway Company when it further asked an instruction that the plaintiffs could not recover damages for the depreciation in the price of so much of the hay as was on their farm, five miles from the station. The facts were that the hay which the plaintiffs desired to ship was stored partly at their warehouse near the station and partly in a barn on their farm, five miles distant. Whenever the plaintiffs got a car they loaded the hay from the warehouse near the station, or hauled it from their barn on the farm. This was the customary and usual method of shipping hay. It was undisputed that the plaintiffs had the hay under their control and ready for shipment as soon as cars were furnished therefor; and it could not be questioned that they in good faith demanded cars to ship this identical hay, which was ready for shipment according to the usual method of shipping such commodities when the demand for cars was made.

The shipper has a reasonable time, after his car arrives, to load it. This is not a question of delivery to the carrier, but is a question of furnishing cars in order that the shipper may make delivery to the carrier. The mere fact that the commodity is not on the platform is not an excuse for failing to furnish cars when the commodity is under control of the shipper and ready for shipment in the usual way such commodity is shipped.

Good-Will Is Property.—Good-will, the Supreme Court of Minnesota holds, Haugen vs. Sundseth, 118 Northwestern Reporter, 666, is an advantage and benefit gained by business establishments beyond the value of the money and property invested therein, and is "property" in the legal sense of the term, and subject to sale in connection with the business precisely as other personal property is subject to sale. It is assignable by the purchaser, though the transfer from the original owner does not run to the purchaser, "his successors and assigns." The use of those words or their equivalents is unnecessary to confer the right of subsequent alienation.

Liability for Storage Charges on Freight.—When a carrier has completed the transportation of the freight, and notifies the consignee of its arrival, and a reasonable time for him to accept delivery elapses, the relationship of the transportation company to the property changes from that of carrier to that of warehouseman. The liability as warehouseman carries with it the reciprocal right of being paid storage charges. The shipper cannot recover the goods from the carrier until he pays or tenders, not only the freight charges, but also the storage charges. For both of these things the carrier has a lien; that is to say, a right as a rule to hold all or any part of the goods until its lawful charges are paid in full. Moreover, the Court of Appeals of Georgia holds that the contention in the case before it, Seaboard Air Line Railway vs. Shackelford, 63 Southeastern Reporter, 252, that the railway company was entitled to no storage charges in the present case, because the machinery shipped was left on the platform, instead of

being placed inside the depot, was without merit. The company was just as responsible for the care of the property, was just as liable for any damage done it while it was on the platform, as it would have been if the machinery had been placed inside the building.

Rules Relative to Damages Recoverable for Breach of Contract.—It is well established, the Supreme Court of North Carolina says, Wilkinson vs. Dunbar, 62 Southeastern Reporter, 748, that, where there has been definite and absolute breach of a contract which is single and entire, all damages, both present and prospective, suffered by the injured party may, and usually must, be recovered in one and the same action; and, when prospective damages are allowed, they must be such as were in reasonable contemplation of the parties, and capable of being ascertained with a reasonable degree of certainty. This requirement as to the certainty of damages recoverable is frequently said to exclude the idea of profits, but this statement must be understood to refer to the profits expected by reason of collateral engagements of the parties, or the profits of a going concern to arise from current sales and bargains which are yet to be made and dependent to a great extent on the uncertainty of trade and fluctuations of the market. Accordingly it has been held that profits of an old-established business may sometimes be allowed as damages, when they can be ascertained with a reasonable degree of certainty, and, under like circumstance, the prospective profits to arise directly from the contract declared on are also recoverable.

NATIONAL ARBITRATION DECISION.

The following decision has been rendered (under date of March 27, 1909) by the arbitration committee of the Grain Dealers' National Association:

B. T. Railsback's Sons, Hopedale, Ill., plaintiffs vs. A. C. Schuff & Co., Louisville, Ky., defendants:

Statement of the Case.—On February 25, 1907, plaintiffs sold to defendant 3,000 bu. No. 3 (or better) corn, at 42 cts. per bu. net track Hopedale, Ill., for 15 days' shipment; and on February 26, 1907, plaintiffs sold defendants 3,000 bu. No. 3 corn (or better) at 42 cts. net track Hopedale, Ill., for 20 days' shipment. Both contracts provided for 1 ct. discount, if No. 4, and on Louisville weights and inspection; and it was further "agreed and understood" that if the grain fails to grade as per contract, it will be applied on contract at regular market difference, if saleable.

Shipments were made by plaintiffs and received and accepted by defendants to complete the first mentioned contract, and 1,942 bu. 23 lbs., to apply on last named contract, leaving apparently unshipped 1,057 bu. 33 lbs.

Findings.—Evidence is furnished to show that defendants should have applied against this contract 286 bus. shipped by C. L. Smith, from Hopedale, Ill., on March 13, being the surplus in cars No. 551709 Pennsylvania Co., and which was bought by plaintiffs of said C. L. Smith, who makes oath that he notified said defendants that the surplus in said car should be applied against said plaintiffs' contract above referred to. There is no evidence whatever to controvert this claim, and it is decided that this additional amount of 286 bu. should be added to plaintiffs' shipments. Also that surplus of 80 bu. 20 lbs., on contract of Jan. 7, should also be added (because defendants, after contract of February 26 had accepted car 136376 to complete said contract of January 7, and surplus 80 bu. 20 lbs. was ordered by plaintiff to apply on next sale of Feb. 25 and 26), making quantity in default 691 bu. 13 lbs.

Time for shipment to apply on this contract expired with March 21, 1907. The rules provide that seller shall notify buyer of his inability to fill contract, and ask for an understanding. Evidence in this case, however, shows that seller (the plaintiff) had no means of knowing whether or not contract had been filled, as their last shipments were not weighed at destination (Louisville) until March 21, and they had no report as to contents of car No. 551709, shipped by C. L. Smith. They are, therefore, in a measure at least, excusable for their silence at the expiration of contract time. This fact does not, however, excuse the buyer (the defendants) from notifying the plaintiffs on the very first day that a default was apparent. This would have been, in this case, on March 22, the day that car 8058 M. P. was unloaded at Louisville, but as the Smith car 551709, heretofore referred to, was not unloaded till March 30, then that date would be the earliest time that quantity in default could be actually known, and on this date, the defendants should have notified the plaintiffs of the amount in default, and agreed on a settlement. They (the defendants) were not warranted in waiting until April 20, before demanding a settlement.

Damages.—We therefore decide from the evidence that the value of No. 3 corn, on March 30, 1907, shall be the basis for settlement. The best evidence submitted shows that at no time from March 21 to March 30 was No. 3 corn worth more

than the contract price of 42 cts. f. o. b. Hopedale, Ill., or a corresponding price at Louisville, Ky., therefore the charge of \$60 made by defendants against the plaintiffs for loss on the unshipped part of contract is improper. This amount of \$60 added to balance \$17.59, as shown by defendants' statement of account, makes an amount of \$77.59 due plaintiffs from defendants; and judgment is hereby rendered in favor of the plaintiffs for the sum of seventy-seven and 59-100 dollars (\$70.59), costs of arbitration to be paid by defendant.

H. S. GRIMES, Chairman.
C. C. MILES,
E. M. WASMUTH,
Committee on Arbitration.

AN UNOFFICIAL OPINION.

A, through B, acting as broker for C, who resides in Ohio, contracted on January 13, 1908, with C for five cars No. 2 timothy hay and five cars No. 1 mixed hay, at a price, delivered Norfolk, to be shipped during February, 1908. Terms, payable on arrival at Norfolk. Under date of January 17 A received a letter from C, through B, embodied in which was an invoice for a car of No. 2 timothy, also explaining why shipment was made then, which was that C was afraid he could not ship during February on account of car shortage then threatening. A few days after A received a letter from C saying that the car contained some hay not up to grade, and he requested A to handle the car to the best advantage, C agreeing to protect A against loss. A replied that he would do the best possible for C. The car arrived on January 27 (in the meantime a demand draft had been presented to B, who requested A to pay same, which A refused to do). A inspected the hay by climbing into the car and immediately advised B that he could not handle it on account of the condition of the hay. B thereupon called in an official inspector, who certified that the hay graded No. 2 on door inspection. A then consented to take care of the draft, B explaining that he had not sufficient funds to pay the draft, and he also guaranteed C against loss if the hay did not turn out as at door. B had the car unloaded into his warehouse and the contents turned out to be about half No. 2 and the balance No. 3 or no grade. In order to protect C from loss on account of storage charges A consented to handle the car at a reduction of \$12 from the invoice price. A sent C an invoice for this difference on February 1; at the same time he wrote C, canceling the balance of the contract on the grounds of C's violating the terms of the contract by shipping before the time specified and also shipping hay not of contract grade. C replied under date of February 10, saying he was surprised at the tone of A's letter and advising that upon receipt of the cancellation he had sold three of the remaining cars (presumably without loss, as he mentioned none), also stating that he would ship a car of No. 1 mixed in a few days, also that he would insist that A take the remaining six cars. Under date of February 12 C sent A an invoice covering car No. 1 mixed. A immediately turned same over to B, advising him that he would not handle the car, as he had already canceled the balance of the order. A demand draft against this shipment was presented to A for payment and refused. A repeatedly tried to get a settlement from C for the difference of \$12, and it was only after A wired C that he would attach a car of hay belonging to C, which was on the spot, if C did not authorize B to pay A's claim, that C did finally on March 9 authorize B to pay said claim. In the meantime A heard nothing from C until about April 10, when C's representative called on A with a claim of \$158, alleged to be the loss on six cars of hay which C had sold March 10-20 in New York, Pennsylvania and Massachusetts. A refused to consider C's claim, as A maintains that, (1) he had a right to cancel on account of C's not complying with the terms of the contract; (2) if A had no right to cancel C should have given him notice before making a resale; (3) if the letter of February 12, in which C wrote that he would insist that A should take his six cars, was sufficient notice, C should have followed that by tendering same to A at Norfolk in order to ascertain if A still persisted in his refusal to accept them. Is A's contention correct in this matter?

A. & B.

Reply.—The buyer is no longer bound by his contract. The first tender was not made at the proper time and it did not consist of the right quality of goods. The buyer was justified in rejecting it, and he did reject it. It is true that he afterward "handled" the shipment, as he says, but this was under a new arrangement and for the benefit of the seller. Because the first tender was not proper as to time or quality, either or both, the buyer is justified in rescinding the whole contract. The seller agreed to deliver five cars of No. 2 timothy hay. All of the five cars were to be of this grade. The whole five cars could not be of this grade unless the first car was of this grade. Accordingly, when the first car proved to be of an inferior grade the seller was guilty, there and then, of a breach

of his contract; the buyer was entitled to rescind the whole contract, and if he cares to do so he may demand damages for the seller's breach of contract. Now the seller insists that the buyer shall accept six cars of merchandise out of ten for which the contract calls. That alone is sufficient to show that the seller is trying to enforce a contract different from that actually made. The buyer never agreed to accept six cars only. It is quite possible that six cars would be of no value to him. He agreed to take ten cars, no more and no less. If the seller were now insisting that he should accept ten cars, or if he were demanding that he should accept nine in addition to that already delivered, his position might be plausible, though it would be untenable. Every contract, however, stands as a whole or falls as a whole. When the seller asks the buyer to accept six cars he is asking him to do something that he never agreed to do, and something that he could not be compelled to do under any possible view of this case. For decisions holding that a failure as to the first installment is a breach of the whole contract, authorizing the innocent party to rescind in toto, see 115 U. S., 188; 102 N. Y., 506; 114 N. Y., 640; 134 N. Y., 92; 149 Ill., 138; 19 R. I., 380; 110 Pa. St., 236.—New York Commercial Bulletin.

I. C. C. DECISIONS.

Among recent reports and decisions of the Interstate Commerce Commission of immediate interest to grain dealers are the following:

RECONSIGNMENTS.

Kansas City Hay Company vs. St. L. & S. F. R. R. Co.—Report by Commissioner Harlan: During the months of September and October, 1907, eight carloads of hay were shipped by the complainant into Kansas City from various stations on the defendant's line and on arrival at that point were reconsigned to various interstate destinations. The freight charges for the through movements were assessed on the basis of the published through rates then in effect from the several points of origin to the respective destinations, to which amounts was added a charge of \$2 per car for the reconsigning privilege. The object of this proceeding is to secure a refund of that additional charge.

There is no controversy as to the facts in the case. The only question we are asked to consider is whether the reconsigning charge was legally applicable on the complainant's shipments. The tariff providing for the reconsigning privilege, and fixing the charge therefor was published by the defendant and filed with the Commission in the manner prescribed by law. It was a special tariff relating to reconsignment and transit privileges on grain, hay and similar commodities. But in its tariff naming the local rates into Kansas City there was no specific reference to or mention of the reconsignment tariff. It is upon this fact that the complainant rests its case. The contention is that because the tariff of the initial carrier, naming the local rates applicable on the original movements into Kansas City, contained no cross-reference to the tariff in which the reconsigning privilege was set up and the charge therefor established, such charge could not lawfully have been added to the published through rates, although the complainant had availed itself of the reconsigning privilege and had thus secured the advantage of through rates, instead of being compelled to pay the sum of the local rates into and out of the reconsigning point.

In support of this theory of the case, the ruling of the Commission in Suffern, Hunt & Co. vs. I. D. & W. Ry. Co., 7 I. C. C. Rep., 255, is relied upon by complainant's counsel as conclusive. The holding in that case, briefly stated, was that rules or regulations which in any wise change, affect or determine any part of the aggregate of a carrier's rates, fares or charges must be shown separately upon the carrier's posted schedules of rates, fares and charges; and any such rules or regulations promulgated by the carrier in circulars issued and filed independently of its rate schedules are not lawfully in force. In other words, the principle announced in substance was that if a rule or regulation affecting rates is not set forth in the tariff naming the rate thereby changed or affected, there must be in the tariff naming the rate a reference to the schedule in which such rule or regulations is to be found. It will be observed, however, that the rule discussed in that case was one prescribing the maximum and minimum weights for carload shipments. Such a rule, strictly speaking, is not "a rule or regulation affecting rates," but is rather a part of the rate itself. A carload rate is not accurately stated unless the carload minimum weight is also specified. And if this be not done in the tariff naming the carload rate itself there ought at least to be in that tariff a specific reference to the circular or tariff in which the minimum weight is fixed.

Without intending to be understood as impairing the authority of that case with respect to the particular phase of tariff construction there under consideration, we cannot recognize it as in any sense a precedent of controlling force in this case. At the time the shipments in question were made railroad companies were governed in the preparation, issuance and filing of their tariff schedules and classifications by the regulations of Tariff Circular No. 14-A, promulgated by the Commission on June 3, 1907, under the authority conferred on it by section 6 of the amended act to determine and prescribe the form in which tariff schedules shall be prepared and arranged.

Rule 10 of that circular required carriers to—"publish, with proper I. C. C. numbers, post and file separate tariffs which shall contain in clear, plain and specific terms all the terminal charges and allowances, such as arbitraries, switching, icing, storage, elevation and car service, together with all other charges and rules which in any way increase or decrease the amount to be paid on any shipment as stated in the tariff which contains the rate applicable to such shipment."

It did not provide that there must be in the tariff naming rates a reference by number to the separate tariffs in which terminal charges, reconsigning rules or other provisions of that general nature were set forth. In this respect the rule was subsequently amended on March 9, 1908. As it appears in Tariff Circular 15-A, promulgated on April 15, 1908, Rule 10 contains this clause:

"If such privilege is granted or charge is made in connection with the rate under which the shipment moves from point of origin, the initial carrier's tariff which contains such rate must also show the privilege or the charge or must state that shipments therunder are entitled to such privileges and subject to such charges according to the tariffs of the carriers granting the privileges or performing the services."

The defendant has adjusted its tariffs in conformity with the requirements of the amended rule, and its present tariff naming local rates on hay into Kansas City refers to the tariff in which its reconsignment privileges and charges are published, and provides that shipments moving into Kansas City on such local rates are entitled to the reconsignment privileges shown in the tariff, to which the cross-reference is made, on the basis of the charges therein established. But there was no such requirement under the tariff regulations of the Commission in force when the complainant's shipments moved. So far as this record advises us the defendant's tariffs in these particulars were not in violation of the law or of the Commission's regulations then in effect.

It may be well to add that the privilege of reconsigning with the protection of the through rate can lawfully be enjoyed by shippers only when there is proper tariff authority for it. In this case the privilege was provided for in the same tariff that named the \$2 charge therefor, and authorized the collection of the balance of the through rate. Had that tariff been defective in any respect, and as a consequence of the defect the complainant could not lawfully have been called upon by the carrier to pay the \$2 charge on these shipments, it must not be forgotten that the complainant could not in that event properly have demanded or obtained the benefit of the through rate, but would have been required to pay the combination of the locals into and out of Kansas City.

There is no showing or any pretense that the reconsigning charge was an unreasonable one. The complaint is therefore without merit from any point of view and must be dismissed. An order will be entered in accordance herewith.

AS TO FURNISHING CARS OF SPECIFIED SIZE.

J. G. Falls & Co. vs. C., R. I. & P. Ry. Co. et al.—This was a petition for reparation, growing out of a request of the shipper for a car of a given size in order to make one carload of a single shipment. Two cars, however, were furnished by the carrier. Commissioner Harlan, in his report, among other things, says: "The theory of the petitioner is that if the Frisco had supplied one car large enough to take the entire 50 bales, they would have gone through from St. Louis to destination at the published carload rate on the one car, the total weight of the shipment being within the carload minimum weight provided in the tariffs of the connecting lines, and that he would thus have escaped the charges that he was compelled to pay on the second car." The complainant states that he had previously made similar requests which had been complied with. Aside from the natural desire of a carrier to comply with the reasonable requests of its shippers, it would doubtless cost it less to use one large car when available instead of two smaller cars. The Frisco must therefore be acquitted of any intentional disregard of the complainant's request, and no such charge is in fact made against it. Assuming that it was aware of the condition of the tariffs of its connections at St. Louis and understood that one car had been requested in order that the complainant's shipment might come within the terms of those tariffs, the question before us then is whether the Frisco was bound as a matter of law to furnish one car to the complainant sufficiently large to hold the 50 bales, and whether, having been unable to do so, it is responsible to the complainant in the amount of the additional charges that he was compelled to pay on the second car. It is probably true under an any-quantity rate that if the complainant and the Frisco agent had reached an agreement before the shipment was tendered, under which the Frisco undertook to furnish a car large enough to take the 50 bales, the complainant could have held it to the fulfillment of the agreement notwithstanding. Upon that point we make no ruling at this time. But there is no pretense here of any agreement. It was a mere request on the part of the complainant, with which, as the record shows, the Frisco was unable to comply. Does such a request impose any duty on the carrier under such circumstances, even if it be assumed that it has knowledge of the fact that its compliance will save the shipper additional freight charges on connecting lines? Stating the question in another form. Has the shipper under such circumstances the right to demand of a carrier a car large enough to take the shipment offered? We think not. In such matters the carriers' own published tariffs would seem to be the measure of its obligations to shippers. It cannot be controlled in

its duties to shippers by the terms of the separate tariffs of its connections. One of the benefits, if not one of the objects, of an 'any-quantity' rate is that it leaves the carrier with some freedom in the use of its equipment. Such a tariff gives the shipper no right to demand a car of a given size. Even if a larger car had been available the carrier was not bound to give it to this complainant for a shipment carrying an any-quantity rate. It might very well be that the larger car would be required by another shipper for the movement of another commodity that could be carried economically only under a carload rate based on a minimum weight. In such case the carrier under its tariffs would seem to be under the necessity of assigning the car to that shipper. While a carrier in accepting a shipment ought to consider the convenience and interests of the shipper, nevertheless, as a matter of law, it is under an obligation only of satisfying the requirements of its own tariffs. It can be called upon to do for shippers only what it offers to do in its own tariffs or in any joint tariffs to which it is properly named as a party. It cannot be compelled to meet the requirements of the separate tariffs of its connections."

OBITUARY

J. W. Lauters, a member of the firm of Lauters & Schmidt, grain dealers at Fredonia, Wis., died recently at his home in that city at the age of fifty-one.

Thomas C. Smith, for many years connected with the firm of J. A. Edwards & Co., and one of the oldest members of the Chicago Board of Trade, died recently.

R. Bruce Hays, a well-known grain dealer at Hawthorne, Hay's Grove and Greason, Pa., died recently at the last mentioned place. The cause of his death was tuberculosis. He leaves behind a wife and two children.

William Forbes, aged fifty-one years, a prominent grain dealer of Ohlman, Ill., died suddenly of heart trouble recently. His death came without warning, as he had apparently been in the best of health. A widow and five children survive.

Charles A. Campbell, for eighteen years engaged in the hay and grain business at Detroit, Mich., died recently at his home in that city. Cancer was the cause of his death. Mr. Campbell was a Canadian by birth. A wife and one son survive.

Josiah C. Towle, for fifty years one of the prominent business men of Bangor, Me., died at his home in that city recently at the age of seventy-four. Mr. Towle has been in the grain business in Bangor since 1860. He is survived by four children.

John K. Beidler, the well known grain merchant of Oakville, Pa., died at his home in that place on April 2, his eighty-first birthday. Mr. Beidler was born in Lebanon, Pa., and served in the Civil War. For the past 15 years he had been engaged in the grain business at Oakville. A wife and two children survive.

Jacob Marx, a well known grain dealer of Oshkosh, Wis., died recently at St. Elizabeth's Hospital, Chicago. Mr. Marx was born near Berlin, Germany in 1845, and came to this country in 1874. He had been engaged in the grain business at Oshkosh since 1896. He is survived by a widow and three children.

A. V. De Laporte, one of the oldest citizens of Toronto, Ont., and a pioneer grain merchant of that city died last month at his home in Toronto. Mr. De Laporte was ninety-one years of age and until recently had enjoyed the best of health. He went to Canada in 1843 from the Island of Guernsey, and embarked in the grain business in 1846. His widow, two sons and three daughters survive.

Maria Waitzmann, wife of Otto Waitzmann, manager of the wheat and export department of Rosenbaum Brothers of Chicago, passed away March 24 at Evangelical Deaconess Hospital, Chicago. Her death was caused by heart disease superinduced by inflammatory rheumatism. Mrs. Waitzmann was born in Breslau, Germany, and came to this country in her early womanhood. She was 42 years of age. The funeral took place at Mr. Waitzmann's home, 42 Alexander place, on March 26, and the interment was at St. Boniface Cemetery.

Thomas Wyan Russell, founder of the Russell Grain Co., of Kansas City, Mo., died last month at his home in that city. Mr. Russell had been an invalid for the past ten years, the business of the company being conducted by his sons, E. B. and James N. Russell. Mr. Russell was born in Boonville, Mo., July 3, 1841. He engaged in the hardware business for many years, starting as a grain dealer in Kansas City in 1885, being one of the veteran members of the Kansas City Board of Trade. Mr. Russell was a Knight Templar, a Shriner and a member of the A. O. U. W. A widow and four children are living.

The charter of the Rockwell Farmers' Incorporated Co-operative Society of Rockwell, Ia., having expired by limitation after twenty years, has been re-incorporated for another 20-year term.

ASSOCIATIONS

NATIONAL HAY ASSOCIATION.

The following is a list of dealers who have become members of the National Hay Association since the last report published.

Edw. J. Gage, Greenville, S. C.; C. M. Horst, Hagerstown, Md.; Ferdinand Maier, Wilkesbarre, Pa.; W. W. Dempster, Providence, R. I.; The Jamison-Conger Grain & Pro. Co., Trinidad, Colo.; Van Etton Pro. Co., Van Etton, N. Y.; S. W. Browne & Co., Brooklyn; The F C Ayres Mer Co, Denver

The annual convention of this Association will be held at Ada Point on Lake Erie near Sandusky on July 27-29, 1909.

ANNUAL ASSOCIATION MEETING.

The National Hay Association takes their annual outing at Cedar Point, the last week in July. Headquarters at the Breakers.

The Grain Dealers' National Association meets at Indianapolis on October 18, 19 and 20. Headquarters at Claypool hotel.

The usual mid-summer meeting of the Indiana Grain Dealers' Association will be held in the Assembly Room of the Board of Trade at Indianapolis on June 23. The program will appear later.

The annual meeting of the Western Grain Dealers' Association will be held during May this year.

The Illinois Grain Dealers' Association will hold their annual convention at Peoria, June 15 and 16.

NEW MEMBERS IN KANSAS.

The following firms and individuals have made application for membership in the Kansas Grain Dealers' Association since January 1, 1909; P. D. Perrill, Marysville, Kans.; Central Commission Co., Topeka; L. T. Shrader & Co., Dexter; Culver Gr. & L. S. Ass'n, Culver; Meade Gr. Co., successors to Davis & Co., Meade; T. H. Bunch, Little Rock, Ark.; G. G. Weichen Co., Garden Plain; F. E. Michaels, Scranton; James Dobbs, Wichita; Carroll Milling Co., Chapman; Henry Kroff & Co., Lanham, Neb.; Nathan Smith, Riverdale; Hamell & Noble, Moran; Erie Gr. & Lumber Co., Erie; Morris County Gr. Co., Council Grove; Excelsior Water Mills and Gibbon & Reid, Burlington; W. H. Roberts, Savonberg; J. J. Kulhman, Bonita; D. W. Finney, Neosho Falls; Kulhman Bros., Strawn; I. E. Clark, Walnut; Richardson & Tomlinson, Savonberg; G. E. Vining, Ma-haska.

RAILROAD MATTERS IN THE SOUTHWEST.

Editor American Elevator and Grain Trade: H. B. Dorsey, Secretary of the Texas Grain Dealers' Association, recently arranged for a conference between the Southwestern Traffic Commission and representatives of Iowa, Kansas, Oklahoma and Texas dealers, to be held in St. Louis on March 24. The purpose of this conference was to see if we could get the railroad representatives to consent to the modifications and changes that we deemed necessary to make in the uniform bill of lading. The following exceptions were taken:

In Section 1 of the uniform bill of lading, the second paragraph, we requested that they eliminate the words "or for differences in the weights of grain, seed or other commodity caused by natural shrinkage or discrepancies in elevator weights," insert after the word "export" the following: "and not covered by a through bill of lading to a foreign port," making the clause read as follows: "for loss, damage or delay caused by fire occurring after forty-eight hours (exclusive of legal holidays), after notice of the arrival of the property at destination or at port of export (if intended for export and not covered by a through bill of lading to a foreign port), has not been duly sent or given, the carrier's liability shall be that of a warehouseman only."

Section 3 is to eliminate from the second paragraph of this section the following words: "being the bona fide invoice, if any, to the consignee at the place and time of shipment under this bill of lading," making the paragraph read as follows: "The amount of any loss or damage for which any carrier is liable shall be computed on the basis of the value of the property (including the freight charges, if prepaid), unless a lower value of the property has been represented in writing by the shipper."

To strike out entirely the third paragraph of this section, reading as follows: "Claims for loss damage or delay must be made in writing to the carrier at the point of delivery or at the point of origin, within four months after delivery of the property; or in case of failure to make delivery, then within four months after a reasonable length of time for delivery has elapsed." Section 4 to strike out the words, "and shall not be held responsible for deviation or unavoidable delays in procuring such compression." Also strike out the last paragraph of this section reading as follows: "Grain in bulk consigned to a point where there is a railroad, public, or licensed elevator, may (unless otherwise expressly noted herein, and then if it is not promptly unloaded) be there delivered and placed with other

grain of the same kind and grade without respect to ownership, and if so delivered shall be subject to a lien of elevator charges in addition to all other charges hereunto," and substitute therefore the following: "Grain in bulk consigned to a point where there is a railroad, public or licensed elevator, may, if not removed within forty-eight hours after notice of its arrival has been duly sent or given, be there delivered, and if so delivered shall be subject to a lien for elevator charges in addition to all other charges hereunto."

In Section 5 the meaning of the words "or other sidings, wharves, or landings," in the last paragraph of this section, being ambiguous and doubtful, the bill of lading committee was instructed to ask the uniform bill of lading committee of the carriers in Official Classification Territory to explain just what was intended to be covered by these terms.

In Section 9, after the word "route," in the third line of the first paragraph, insert the following: "Except as to property transported under rates which include marine insurance." The amended paragraph then would read: "Except in case of diversion from rail to water route, which is provided for in section three hereof, if all or any part of said property is carried by water over any part of said route, except as to property transported under rates which include marine insurance, such water carriage shall be performed subject to the liabilities, limitations and exemptions provided by statute."

No exceptions were taken to section 2 for the reason that the Federal court has lately held rule of the Interstate Commerce Commission to be constitutional, making the initial carrier liable to the shipper for loss or damage occurring on its own or connecting lines.

Very truly yours,

Topeka, Kan.

E. J. SMILEY, Sec'y.

RUSSIAN TRICKS.

In connection with the recent dispute between grain exporters at Nicolaieff and European grain buyers concerning excessive adulteration, disclosed by official analysis in Europe, but contradicted by official analysis at the port of departure, the trick has now come to light in Russia, and fully upholds the claims of the European buyers.

The gain, in one instance which has been exposed, was in store some distance from the loading wharf. It was put in sacks, a small quantity being drawn from each sack as filled to form a sample for the official analysis of the Bourse Committee, and the sacks were conveyed on carts to the ship's side, where they were passed and emptied into the hold. Each cart took sixteen sacks, but a rival exporter's clerk noticed that the carts left the warehouse yard with only fourteen sacks. En route to the wharf two sacks were added to each load, and these contained sand!

The diplomatic representatives of Germany, France and England have been engaged pressing claims arising from these tricks of Russian grain exporters upon the government for two years past, says the London Standard. The Russian Ministry fully recognizes the disastrous effects upon Russia's chief export which these methods produce, but neither the state of commercial law in Russia nor the practical powers of most Russian ministries are sufficient to cope successfully with the methods of South Russian grain exporters.

CANADIAN ELEVATOR CAPACITY.

C. C. Castle, warehouse commissioner of Canada, in his annual report, says that the interior elevator capacity west of the lakes is now 42,812,400 bushels, as against 39,734,000 in 1907. To this must be added terminal storage 18,852,700 bushels at Fort William and Port Arthur and 1,300,000 mill elevators at Keewatin. This makes a grand total west of the great lakes of 62,965,100 bushels, as against 58,482,700 in 1907.

This elevator capacity, divided by provinces, gives Manitoba 678 elevators and 13 warehouses, with a capacity of 20,558,500 bushels, as against 20,983,000 in 1907. Saskatchewan has 607 elevators and 14 warehouses, with a capacity of 17,699,500, as against 14,621,500 last year. Alberta, 120 elevators and 14 warehouses, with a capacity of 4,386,400, as against 3,843,500 last year. British Columbia, 3 elevators, with a capacity of 276,000 bushels.

Divided by railways the C. P. R. has 949 elevators and 26 warehouses; the C. N. R. 386 elevators and 12 warehouses; the G. N. R. 23 elevators; the G. T. P. 39 elevators; last year this road had one small flat warehouse. The Alberta R. I. Company has 11 elevators. The total increase in interior elevator capacity is 3,088,400 bushels and in terminal elevator storage capacity 1,394,000.

The transfer and terminal storage east of the lakes now in the Manitoba inspection division is as follows: C. P. R., Goderich, Kingston and Owen Sound, 2,296,000; G. T. P., Collingwood, Depot Harbor, Meaford, Midland, Prescott and Tiffin, 7,449,000; Montreal, 2,581,000; Quebec, 500,000; West St. Johns, 1,000,000; St. John, 500,000; Halifax, 500,000.

FIRE-CASUALTIES

Fire destroyed the Woodworth Elevator at Overly, N. D., on March 19, also 2,000 bushels of grain.

The elevator at Berne, Kan., was blown down recently during a severe windstorm. No one was injured.

The elevator of W. C. Calhoun at Pisgah, Ill., was entirely destroyed by fire on April 8. Particulars cannot be obtained.

The hay and grain warehouse of Vincent Bros., at Bridgeport, Conn., was burned recently. The loss is placed at \$30,000.

The Minnesota Elevator at Agate, N. D., was burned to the ground on March 25. About 7,000 bushels of grain were lost.

The E. A. Brown Elevator at Elkton, S. D., was destroyed recently by a fire of unknown origin. Considerable grain and flour was also lost.

On March 11 the elevator of the Empire Elevator Co. at Winship, S. D., was burned to the ground, together with 4,000 bushels of grain, all of which is a total loss.

The elevator of the Interstate Grain and Elevator Co. at East St. Louis, Ill., was destroyed by fire on April 4. Insurance on the building and grain amounts to \$45,000.

Fire destroyed the Ogilvie grain elevator at Willow Range, Man., on March 20. About 13,000 bushels of grain were in it at the time, and the loss is estimated at \$20,000.

The elevator at Foley, Minn., was destroyed by fire recently. About 4,000 bushels of wheat in the elevator at the time of the fire seems to have been unharmed and is still marketable.

A gasoline tank at Hubbard & Palmer's Elevator at Lewisville, Minn., exploded recently, causing a blaze which destroyed a leanto of the elevator and a coal shed containing 90 tons of coal.

The old Robinson Elevator at Kenmore, N. D., was badly damaged by fire on March 31. The house, which was owned by the Victoria Elevator Co. of Minneapolis, was not entirely destroyed.

The Reliance Elevator at Hudson, S. D., was destroyed by fire, supposed to be the work of an incendiary, on March 13. Corn and oats to the amount of 5,000 bushels were destroyed in the fire.

A small warehouse of the Omaha Grain and Elevator Co. at Grand Island, Neb., was destroyed by fire recently. Sparks from a locomotive caused the blaze. The building was empty. The loss is about \$500.

The Aitken Elevator on the Santa Fe at Stafford, Kan., was destroyed by fire on March 31. About 1,500 bushels of wheat were destroyed. The loss on building and grain is fully covered by insurance.

The E. A. Brown Elevator at Elkton, S. D., was completely wrecked by fire on March 21, the origin of which is unknown. About 17,000 bushels of grain and a quantity of flour were destroyed. Some insurance was carried.

The Clarke & Hannah Elevator at Orangeville, Ont., was destroyed by fire on March 5, together with 15,000 bushels of wheat. The capacity of the elevator was 30,000 bushels. The grain was insured and the building partially insured.

Fire at Simms, Texas, completely destroyed the elevator at that place owned by H. J. Hauck & Bro., of Kansas City. Rice valued at about \$3,000 and some corn were in the building. Insurance to the amount of \$15,000 was carried on the elevator. It will be rebuilt at once.

The large grain elevator and warehouse of the Wilkinson-Gaddis Co. at Newark, N. J., was destroyed on April 4 by a fire which started in the engine room in the center of the plant. The loss is estimated at \$50,000. About 2,000 tons of flour and 40,000 bushels of oats were lost.

The large elevator at Keystone, Okla., owned by S. R. Morris, together with all the corn and wheat contained in it, are a total loss from fire, which occurred on March 25. The cause of the fire is not known, but it is presumed a spark from a passing locomotive started it. The loss is \$6,000; insurance \$4,000.

The Homestead Elevator at Underwood, N. D., was destroyed by fire on March 10. It was one of the largest elevators on the Soo line in that section of the country. The building was half full of grain, containing about 7,000 bushels, and the loss is estimated at \$3,000. The fire is supposed to have been caused by sparks from a hotel fire of the day before.

Two cars of wheat, one car of corn and a partially filled car of hay were burned up at Yuma, a grain station near Concordia, Kan., on March 17. Owing to Charles Bentley, the elevator man, assisted by two men and two boys, in moving 32 cars, most of which were loaded with grain, away from the elevator, that building was saved from destruction as well as much grain. The fire started

in the car of hay close to the elevator and spread rapidly.

The Farmers' Elevator Co.'s alfalfa mill at Minneapolis, Kau., burned down March 31. The loss was \$5,000, fully insured. A car of alfalfa meal, valued at \$350, standing on the railroad track nearby was also destroyed. The engine room was damaged, but the elevator escaped. The mill will be rebuilt.

The farmers' elevator at Vermillion, S. D., was destroyed by fire April 4, entailing a loss of \$10,000 with \$4,000 insurance on building. The elevator contained 10,000 bushels of wheat, oats and corn. It will be rebuilt immediately. The fire was doubtless of incendiary origin, as kindling soaked with kerosene was found underneath the building.

Bingham Bros.' elevator at Gilfillan, Minn., near Redwood Falls, was burned down on March 12, the loss being over \$7,000. The fire was caused by a man standing near a gasoline tank in a small building near the elevator emptying his pipe of live coals. The wheat buyer was severely burned. The Binghams are undecided about rebuilding.

The H. H. Crouch Grain Co.'s elevator and a quantity of grain and mill products were destroyed by fire at East Waco, Texas, on March 30. The loss is about \$8,000, with \$5,000 insurance, \$3,000 of which was carried on the grain and mill products and \$2,000 on the building and machinery. The origin of the fire is unknown. Rebuilding will begin at once.

The F. H. Dolson Grain Co.'s elevator at McCune, Kan., was completely destroyed by fire March 20, at an estimated loss of nearly \$4,000 with insurance of \$1,750. The building contained 400 sacks of flour, 600 bushels of corn, 100 sacks of feed and 150 bushels of wheat. Only 20 sacks of feed were saved. The origin of the fire is a mystery. The owners are undecided whether to rebuild or not.

M. W. Nelson, owner of the Independent Elevator at Grano, N. D., met with a serious accident on March 22, which nearly cost his life. While at work about the belting, his hands got tangled in the lacing and he was thrown so violently, striking his head, that he lost consciousness and fell upon the fast moving belt, receiving severe cuts and bruises about the head before he was taken from the belt by the drayman. It was several hours before he regained consciousness.

The A. J. Edwards & Son's Elevator at Webberville, Mich., was completely destroyed by fire on March 25, thought to have originated from a furnace in the basement. The loss is \$15,000, with only partial insurance. The building was erected last summer and was considered one of the finest of its kind in the state. It was heated by steam and supplied by electricity from a private plant installed by Mr. Edwards. When clearing away the debris after the fire, workmen were astonished to find under the ruins in the basement two 65-gallon tanks and a five-gallon can of gasoline intact. The wheat falling upon them, as the bottoms of the bins gave way, protected them from the flames. Mr. Edwards has not decided whether to rebuild or not.

CASES OF CARELESSNESS.

Insurance Engineering of New York publishes as "horrid examples" many typical surveys of property by insurance inspectors that reveal carelessness or ignorance on the part of the owners—neglect and bad conditions, the correction of which would mean safety to the insured. These examples often lead to the correction of the same mistakes by others. Here are three cases in the elevator line:

Grain Elevator, New York.—A brick and frame, sprinklered elevator. Boiler room not cut off in standard manner; too many sprinklers on dry valve (712); inadequate protection against exposure. The segregation of hazards is a very important part of the plan to lessen the fire waste. As their presence within the risk is an accepted condition, the inherent hazard must always be of moment, but various means may be employed whereby the dangers of one may not extend to the other. Boiler rooms should always be cut off from the other portions of the risk in the most complete and effective manner, this generally being found in a fire-resistance wall built from the ground up to a point three feet above the roof, not less than eight inches thick, and having all openings in same protected by standard fire doors. Sprinkler protection is in a sense a mathematical computation; the water supply should be equal to the maximum needs of the system. The number of sprinklers dependent on one dry-pipe valve should not exceed 500. Where more than 500 sprinklers are necessary in buildings containing two or more floors the system should preferably be divided horizontally and supplied through two or more dry-pipe valves. As this risk is equipped with sprinklers, perhaps the most effective protection against exposure would be a line of open sprinklers to form a water curtain on the outside.

Grain Elevator, New Jersey.—A large frame, sprinklered grain elevator. Unprotected floor openings; water supply for sprinklers insufficient; space under bin floors unsprinklered. In a risk of this character floor openings cannot very well be encased in brick, but they can be trapped with doors the same thickness as the floors. Two independent water supplies are absolutely essential to the best sprinkler equipment, for two reasons: (1) That one may be available in case the other is temporarily out of service; (2) to reinforce a primary supply of limited capacity. The primary supply should properly furnish water under heavy pressure, that the first sprinkler opened may be thoroughly effective. The acceptable surplus for sprinkler systems include public waterworks system, duplex steam pumps, private reservoir or standpipe, gravity tank, air-pressure tank and rotary pump. A desirable combination for many city risks being public waterworks and air-pressure tank, where waterworks pressure is not sufficient, a steam pump and gravity tank should be employed. Too much stress cannot be laid upon the importance of thoroughly installing sprinklers within all enclosures. A fire within even a small enclosure may continue burning untouched by the spray from sprinklers on the ceiling of a room and the heat may open up sprinkler after sprinkler, accomplishing an unnecessary water damage, if not overtaxing the water supply, so that when fire finally breaks through it may spread unchecked.

Grain Elevator, New York.—A good-sized wood, corrugated iron and plaster clad, sprinklered elevator of fair construction. Sprinkler valves not strapped open; premises in very unclean condition; sprinklers not placed where needed. Sprinklers are supposed to give ideal fire protection, conveying water to the place it is most needed at the proper time; operation depends a good deal upon the care of the system. The most important of all is the water supply. It should be plentiful and not obstructed in any way. All gate valves should be strapped open by padlocked or riveted straps. Cleanliness is an indication of good management, and vice versa, for, to the inspector, a risk in the best order must be under good management, and therefore it becomes an acceptable risk. The installation of the sprinkler system must be attended by thought, and careful consideration of hazards and construction, for the protection will be faulty if the heads are not placed so as to spray immediately upon the fire, no matter where it may occur. Experience teaches that sprinklers are often necessary where seemingly least needed. Protection is required not only where a fire may begin, but wherever any fire may extend, including wet or damp locations.

A NEW BOOK.

"Swine in America" is the name of a new book by F. D. Coburn, the able secretary of the Kansas State Board of Agriculture. It is like all of the recent volumes brought out by this accomplished writer on agricultural themes, exhaustive—a companion book to his great work on "Alfalfa," and likely to take its place with the latter as the chief authority on the subject. In "Swine in America" every phase of hog-raising is considered from a practical standpoint; and the latest contributions to the science and art of handling and managing hogs to the hour of publication are weighed and discussed in this important work. It is a book every hog raiser should own and consult frequently. The volume is handsomely printed on fine paper from large, clear type and is profusely illustrated, containing a large number of half-tone illustrations and drawings, many of them full-page plates, which are printed on a special plate paper. Another marked feature is the frontispiece, this being an anatomical and physiological model of the hog, which appears in a book of this character for the first time. It is entirely new and original, and should prove of the greatest value to every one—teacher, student, stockman, farmer or general reader. The model consists of a series of superposed plates, colored to nature, on heavy serviceable paper, showing all the skeleton muscles, internal organs, etc., in their relative positions. This model is accompanied by an elaborate explanatory key to provide the reader with the requisite knowledge to its successful manipulation.

The work contains 704 pages (6x9 inches), bound in fine silk cloth, gold side and back stamping, making one of the handsomest and most attractive agricultural books ever placed before the public, and no one can claim to be up to date in swine matters unless he possesses a copy. The price is \$2.50 postpaid, and will be sent by the publishers, the Orange Judd Co., New York and Chicago, or will be sent from this office.

The Kansas City Globe, organ of the exploded Christie bucket-shop, passed into the hands of a receiver on March 13.

A car of salvage grain from Wetonka, S. D., to Minneapolis, from the burned Pacific Elevator Co., was found afire at Aberdeen, and called for the services of the fire department.

TRANSPORTATION

There is talk at Detroit of a new line of four steamers to go into the grain trade this season between Canadian head-of-the-lakes and Montreal.

The Grand Trunk and Erie has filed new regulations with the New York Public Service Commission in reference to furnishing grain doors and lumber for temporary doors and allowances therefor.

The re-establishment of the \$2 reconsignment, or diversion charges by the Trunk Line Association roads has caused a sharp protest at Philadelphia, whose grain men expect to retaliate by consigning via Central Association lines.

It has been officially announced that the first section of the Canadian Pacific's grain route from Montreal to Victoria Harbor on the Georgian Bay will be completed from Montreal to Smith's Falls, a distance of 129 miles, by Sept. 1 next, and that a good deal of work will also be carried forward on the remaining sections during the present year.

The leading dealers doing business with the Dominion Lake Carriers' Association have protested against the new B/L clause referring to responsibility for shortages at destination and having refused to accept its terms, and as that Association has refused point blank to modify them, there seems to be a good case of deadlock unless the government interferes.

The big grain fleet which wintered under the breakwater at Buffalo has been unloaded and some of the fleet have already taken on coal cargoes. The labor situation shows no material change, but it is stated by President Yates of the Marine Engineers' Association that the men will report when called upon to go to work to fit out their boats, but will not sign contracts. Navigation is expected to open during the last week of the month, and only the possibility of labor trouble mars the outlook for a prosperous season. There is strong determination on the part of the vessel owners to operate this season with non-union labor. Just what will develop from this it is impossible to foresee, but the owners believe that the unions will not be able to make any demonstration of importance, as there are many idle men, and idle boats, and the situation is not favorable for a strike.

The decision of the I. C. C. on the complaint of the Creosoting Works, Ltd., vs. I. C. R. R. Co., is interesting as a ruling on demurrage charges. The complainant requisitioned the railroad for 200 flat cars to be delivered at the rate of four a day. Instead of complying with this request the cars were sent in greater number on some days, while on others none at all were furnished. Some were not loaded in the time required by the rules of the Car Service Association. The creosoting works was lax in not protesting against more than four cars a day, being provided, and as a result lost its case. Had the service been performed in that manner in spite of protest, the complainant would have been sustained. The decision held that when a carrier is allowed to furnish more cars than the shipper requires and the shipper makes no protest the shipper cannot complain when the carrier charges demurrage on cars it held without use beyond the free time limit.

The Texas Railroad Commission has allowed a charge of \$1 for changing the destination of any carload shipment originating in and finally sent to a point within the state, unless there is a back haul or an indirect service. In that event an additional charge of one-half per cent tonnage per mile, with a minimum of \$5 per car will be made. If the rate to substituted destination is higher than that to original destination such higher rate, plus extra service charge, if any, will apply; if the substituted rate is less than to the original destination, and the order for destination change is received by the carrier before the shipment arrives at or moves beyond such substituted destination, such lower rate, plus extra service charge, if any, will apply. Only one change of destination is authorized, and the rule does not authorize the observance of orders from shippers or consignee for stopping and holding shipments for further instructions or orders, but only such orders as specify the substituted destination.

THE CARLOAD MINIMUM.

The I. C. C. in a report on the complaint of the J. Rosenbaum Grain Company vs. M., K. & T. orders reparation on the following statement of facts:

The complainant, about October 1, 1907, placed an order with the defendants at Kansas City, Mo., for 10 cars for shipment of wheat to Galveston, Tex., for export. On October 1, 1907, the defendants placed at complainant's elevator for loading 2 cars, M., K. & T. No. 2904, marked capacity 50,000 pounds, and M., K. T. No. 1782, marked capacity 60,000 pounds, and complainant loaded into said 50,000-pounds-capacity car 55,000 pounds—its maximum capacity—and 66,000 pounds in the 60,000-pounds-capacity car. Defendants charged the complainant 18½ cents per 100 pounds on 60,000 in the 50,000-pounds-capacity car and thus collected 18½ cents per 100 pounds on 5,000 pounds more than the maximum loading ca-

pacity of said car. The defendants justify such charge on the ground that their published tariffs provide a minimum of 60,000 pounds on wheat transported from Kansas City to Galveston for export, and that about 81 per cent of their box cars have a capacity of 60,000 pounds, and that taking into consideration the heavy terminal expenses to which they are subjected in moving export grain from Kansas City to Galveston, which are determined by the carload and not by the actual weight of the grain, they are justified in making the minimum not less than 60,000 pounds, and that the rate on export grain is a very low rate based on a minimum weight of 60,000 pounds; that if the minimum weight in their tariff should be the marked capacity of the car, in many cases cars of light capacity would be forced upon the defendants for transportation use and would result in a non-compensatory rate. Other lines transport wheat for export from Kansas City to New Orleans at the same rate of 18½ cents per 100 pounds, and have in their tariffs the proviso that the marked capacity of the car determines the minimum. The defendants have over 1,200 cars of 40,000 pounds capacity, over 663 cars of 50,000 pounds capacity, and over 125 cars with 28,000 pounds capacity, and their plea of justification would enable them to demand and collect for 60,000 pounds of wheat intended for export, although the capacity of the cars furnished for such shipment was only 50,000 pounds, or 40,000 pounds, or 28,000 pounds. The Commission say: "Our conclusions are that the charge for 60,000 pounds at 18½ cents per 100 pounds, when the car's maximum capacity was only 55,000 pounds, and only 55,000 pounds were loaded into the car, was an unreasonable and unjust charge of \$9.25, and the complainant is entitled to reparation for that amount; and that the tariff provision of the defendants prescribing a minimum weight on all shipments of wheat for export from Kansas City to Galveston is unreasonable and unjust, and is in direct conflict with the administrative rulings of this Commission."

The Trunk Line Association announced on March 26 that beginning with April 26 export wheat would be shipped from Buffalo to New York for 4 cents a bushel, a reduction of 1½ cents. The new rate is to be effective for 60 days only. Corresponding reductions will be put into effect for the benefit of Baltimore, Philadelphia and Boston. On the Canada side the Canadian Transportation Company announced a rate of 5½ cents a bushel on grain from Fort William to Montreal, and no terminal charges at Montreal. The Grand Trunk Railway has made a rate of 4 cents a bushel for grain from Georgian Bay ports to Montreal. Both comers said they are prepared to make a still further cut if it becomes necessary to hold the traffic. The rate announced from New York, including terminal charges of nine-tenths of a cent per bushel, figures out one-tenth cent less than 6½ cents per bushel from Fort William to New York, giving the new Canadian rate an advantage of nine-tenths of a cent.

On March 19 I. C. Commissioner Clark heard the complaint of Minneapolis millers and grain men relative to a readjustment of lake and lake-and-rail rates to Seaboard. A large number of experts from all the markets interested were present, and were heard after taking testimony Commissioner Clark said: "There can be nothing final from this hearing. It is a big question. We are gathering much valuable expert information with regard to Minneapolis and the Northwest, and the relation that shippers and manufacturers here hold to the East. All this will have to be prepared and thoroughly digested and it is impossible to say when a decision will be rendered, certainly not for some time yet."

The Seneca Grain, Lumber and Supply Co., of Seneca, Ill., has issued \$20,000 worth of \$50 notes secured by a trust deed on its properties. The notes are issued to pay debts and nearly all have been sold to stockholders. The concern has resumed business.

Profits reported.—Wellsburg Farmers' Elevator Co., Wellsburg, Ia., \$504.64, or a business of \$63,713.39 in 1908-09; Farmers' Elevator Co., Letcher, S. D., 8 per cent one year; Farmers' Elevator Co., Ferguson, Ia., \$2,630.11 for 1908; Beaman Elevator Co., Beaman, Ia., 30 per cent dividend for 1908; Gilman Farmers' Elevator Co., Gilman, Ia., 10 per cent dividend for 1908; Sibley Grain Co., Sibley, Ill., 8 per cent dividend for 1908; Chebanse Grain and Coal Co., Chebanse, Ill., 6 per cent dividend for 1908; Farmers' Elevator Co., Delavan, Ill., 10 per cent dividend; Healey Grain Co., Healey, Ill., 7 per cent dividend.

A valuable public report by F. D. Coburn is just at hand, to-wit, his Sixteenth Biennial Report as Secretary of the Kansas State Board of Agriculture. Part I is devoted to "Profitable Poultry"; Part II to "Farm Animals"; Part III, "On and About the Farm"; Part IV, "In the Farmers' Interest" and "Proceedings of the Board"; Part V., Statistics. It maintains fully the high standard of Mr. Coburn's past reports, than which there are none issued of more practical use to the American and especially the Kansas farmer.

CROP REPORTS

Recent rains have greatly aided the crop in Southern California, and the present prospects are for an excellent yield.

Kentucky conditions in wheat are reported poor. April condition is placed at 84, against 93 a year ago. Acreage is about 10 per cent short. The corn acreage is large. Rye condition is given as 88.

Seeding in Minnesota and the Dakotas is about a week behind last year, but advanced work last fall will place the farmer just about where he was a year ago. Indications point to a large increase in the total grain acreage.

Statistics compiled by the elevator interests of Alberta place the 1908 wheat crop of Alberta at slightly over 24,000,000 bushels. The same authorities estimate that the acreage for this year will be 30 per cent greater than last year.

Secretary H. B. Dorsey of the Texas Grain Dealers' Association states that not more than one-third of the usual acreage of wheat has been planted this year. Corn and oats have also suffered and all crops will probably be short.

Earlier reports of poor conditions in Nebraska have been largely discounted by the latest reports. The general average is good and the alternate freezing and thawing seems to have done but little damage. The acreage compares favorably with that of last year.

Reports from Indiana are somewhat contradictory. All agree that there was considerable March damage, with very little growing weather. Some sections report plant all killed and farmers sowing oats instead. The wheat acreage will undoubtedly be below the average.

Iowa and Illinois both report oats seeding about completed. Indications are that larger areas will be seeded to corn in both states. The Illinois wheat crop will be short. Winter wheat in Iowa is also short, and prospects on spring wheat point to about the same acreage as last year.

The Oklahoma State Board of Agriculture in its last report makes the condition of winter only 78.7 per cent, with winter oats 68.5 and rye 85.7. Winter wheat has suffered from dry weather and high dry winds throughout the winter. The various freezes have badly affected the oats crop.

The "Drovers' Daily Telegram," of Kansas City, which has been making a thorough mail inquiry, recently published the following report on wheat, conditions and acreage: "Kansas condition 85.5, acreage 74.9; Missouri condition 74.7, acreage 86.4; Nebraska condition 82.6, acreage 91.7; Oklahoma condition 80.8, acreage 55.2."

The Missouri April report placed wheat condition at 70 as against 91 a year ago and 79 in December. The acreage is estimated at 1,650,000 acres, a decrease of 12 per cent. Indications are for an unusually large corn acreage, encouraged by the present high price and scarcity of corn in cribs. The oats acreage will be smaller, owing to the high price of seed oats.

B. W. Snow's report of April 1 puts average winter wheat condition at 81.8 against 83.2 last December. Report indicates crop of 400,000,000 bushels or 75,000,000 less than a year ago at this time. Sufficient moisture everywhere reported, except in Texas. Ohio condition is placed at 72, Indiana 74, Illinois 76, Kansas 81, Missouri 74, Nebraska 85, Pacific Coast nearly perfect.

Kansas wheat conditions are reported as fair generally. Sand storms have affected the land lying close to the Arkansas River. The eastern part of the state is suffering somewhat from Hessian fly and worms. Secretary Smiley of the Kansas Grain Dealers' Association, estimates the damage in the state from all causes at 10 per cent. Little of last year's crop is left.

The official report of the Ohio Department of Agriculture for April put the condition of wheat at 62, with great lack of uniformity in correspondents' returns. The condition appears to be best in the southern counties, and poorest along the western border. The area is small, and much which was seeded has been plowed up and put to corn or oats. The amount of the 1908 crop still in the farmers' hands is estimated at 12 per cent. The condition of corn in crib is placed at 98 against 64 a year ago. Rye condition 79 against 86 a year ago.

Fred Mayer of J. F. Zahn & Co. of Toledo, Ohio, makes the following report on Michigan: "Writer just returned this afternoon from a trip up as far as the Michigan line on the C. N. R. R. and made many inquiries and observations as to the condition of the growing wheat crop. He stopped at practically every town between here and the line, and so far as he could ascertain, the prospects are poorer now than some time ago, when we wrote you. On many, in fact you might say the majority, of the fields you would hardly know there was any wheat there except for the scattered spots. Along the track he only saw two small patches that looked anything near like in a fair shape." The

official estimate places wheat condition at 76 as against 86 a year ago. Rye 83 against 88.

The Government Report of April 7 places the average condition of winter wheat on April 1 at 82.2 per cent against 91.3 a year ago and 86.6 the ten year average. The decline since December was 3.1 points as compared with a ten year average decline for the same period of 6 points. Unimportant states furnish the only advances over last year. The largest falling off from last year is Texas, 66 against 95. Ohio is placed at 60 against 85 a year ago, with Indiana 68 against 90 and Illinois 70 against 92. The average condition of rye on April 1 is placed at 87.2 per cent against 89.1 a year ago and 89.2 the ten year average. Texas and Indiana exhibit the worst falling off.

TRANSVAAL CORN GROWING.

Consul Edwin N. Gunsaulus, of Johannesburg, transmits the Department of Commerce and Labor the following report prepared upon request of an American agricultural college on the cultivation of corn in the Transvaal:

Owing to the absence of statistics, the area of land given to the cultivation of corn in the Transvaal is unknown. However, corn is the staple crop, and is grown on every occupied farm in the country. There are 11,679 registered farms in the Transvaal with an average area of 5,000 acres. Of these about 6,000 are occupied, and the area planted to corn on these farms varies from a few acres to 4,000 acres. An average area of 10 acres per farm would make 60,000 acres, which may be taken as a reasonable estimate for the whole country. A considerable quantity is also grown on small patches of ground by the Kaffirs. Although this is a small acreage, considering the available area, the cultivation of corn will in the future become the most important industry in the country.

The average yield per acre is not definitely known, but is approximately 800 lbs. of shelled corn. The poorer class of Boer and the Kaffir grow only about 300 to 400 lbs. per acre, the best farmers 1,600 to 2,000 lbs. on unmanured land. On land well manured the previous year for potatoes an average of 3,000, 3,600 and 4,000 lbs. have been recorded. On very rich and heavily manured lands, at low altitudes and in a subtropical climate, a yield of 5,100 lbs. per acre has been obtained.

The greater portion of the crop is consumed within the country as food by laborers in the mines. It is not sold by the bushel, but by the muid, equal to 200 pounds, and brings \$2 to \$2.50 per muid. The cost of production is estimated to range from 95 cents to \$1.65 per muid.

VARIETIES OF SEED—CLIMATE.

Thus far 61 varieties of corn have been introduced and tested. Both flints and dents are successfully grown; "Hickory King" is the favorite white dent, especially as this variety is preferred for food. Considerable quantities of 8-row yellow flint are grown. The department of agriculture is active in its co-operation with the farmers in introducing the best varieties and experimenting in methods of planting and cultivation.

The climate of the Transvaal is suitable for corn growing. Over a considerable area the climate is warm temperate, with a rainfall of 2 to 35 inches, falling chiefly during the summer months from October to March. The winters are cool and nearly rainless from April to September, inclusive. The nights are invariably cool on the high plateau, even in the hottest summers. Early autumn frosts sometimes catch the late corn if not ripe before the end of March. Spring frosts sometimes fall as late as the first week of October, and then injure the early planted corn.

As there is little or no rain after the corn matures, the crop is left standing in the field to ripen. The frosts are not severe enough to injure the grain after it is ripe. On the largest corn farm in the Transvaal harvesting was not completed this year until the week that planting the new crop commenced.

SOILS—PLANTING AND HARVESTING METHODS.

The soils are on the average poor in quality, usually lacking in lime. Fertilizers are sparingly used, barnyard manure being scarce, as cattle droppings are used for fuel. The distance from the coast, 400 to 500 miles, makes transportation of artificial fertilizer too expensive. Potato growers find it advantageous to grow corn for two years after manuring for potatoes, and get excellent crops as a result. It remains to be demonstrated whether it will pay to manure directly for the corn crop.

The old Boer method of planting by dropping the seed by hand into furrows is rapidly giving way to the use of American check-row and drill planters.

During harvest time natives are employed to pick the ears into bags, leaving the stalks standing in the fields. There is one large steam thrasher in use here, which travels through the fields husking, shelling, winnowing and bagging the corn, the ears being collected by a gang of 50 boys who walk ahead of the machine.

LATE PATENTS

Issued on March 9, 1909.

Apparatus for Elevating and Cleaning Material of a Granular Nature.—Frank Beduwe, Lutnick, Belgium. Filed May 6, 1907. No. 914,475.

Wagon Dump and Elevator.—Frank Gahm, Streator, Ill. Filed November 2, 1908. No. 914,565. See cut.

Grain Car Door.—Daniel W. Thomas, New Holland, Ill. Filed November 25, 1907. No. 914,994. See cut.

Grain Separator.—Timothy C. Vaughan, Alberta, Minn. Filed January 29, 1908. No. 914,997. See cut.

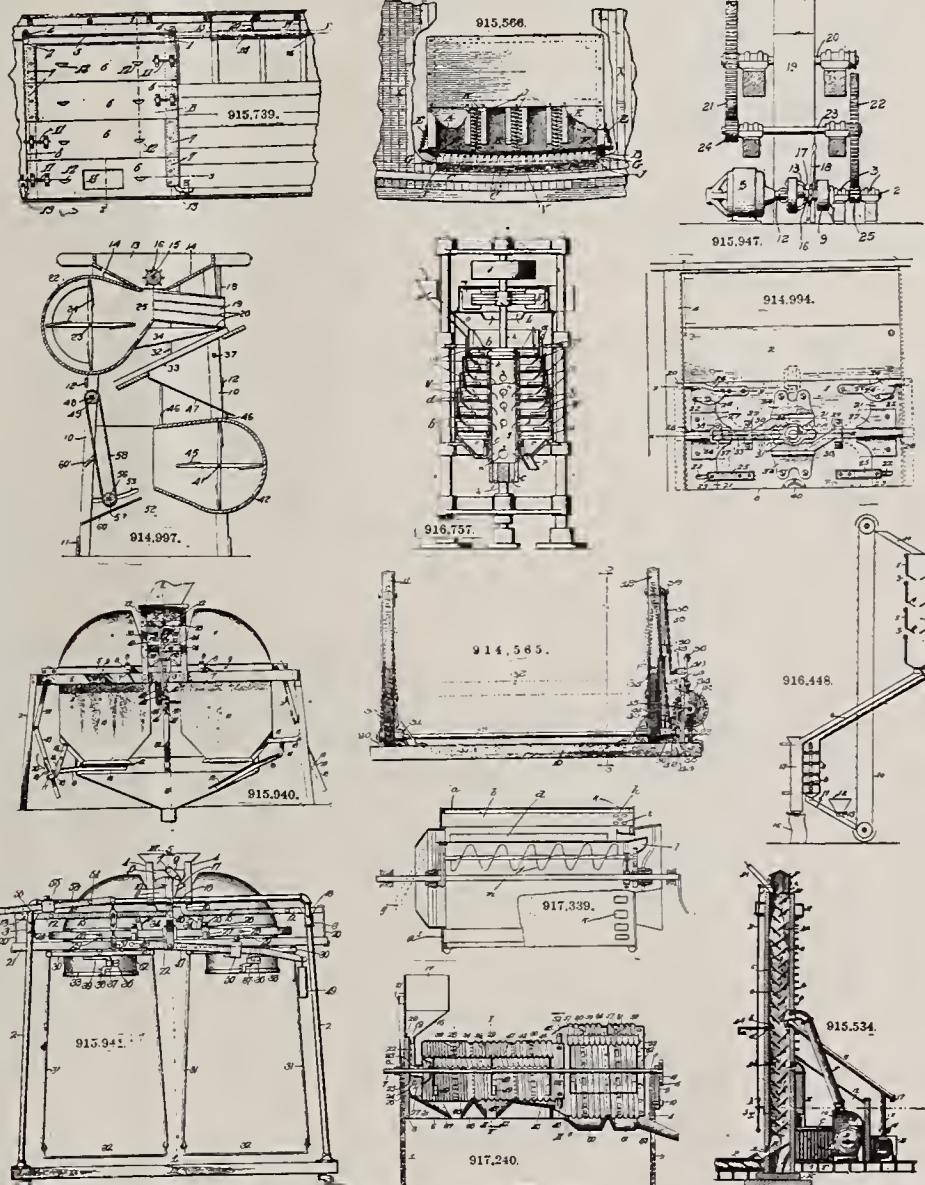
Issued on March 16, 1909.

Combined Grain Drier, Cooler and Bleacher.—Edward P. Arnold, Chicago, Ill. Filed May 20, 1908. No. 915,534. See cut.

Door for Grain Cars.—Lillie Dimick, South Whitley, Ind. Filed June 5, 1908. No. 915,566. See cut.

Issued on March 23, 1909.

Folding Grain Door.—Joseph E. Chantler, Lamar, Colo., assignor of one-half to Coleman B. Butner,



Lamar, Colo. Filed July 21, 1908. No. 915,749. See cut.

Grain Weighing Machine.—Monroe Davis, Blackwell, Okla. Filed April 17, 1908. No. 915,940. See cut.

Grain Weighing and Bagging Machine.—Monroe Davis, Blackwell, Okla. Filed April 17, 1908. No. 915,941. See cut.

Elevator Leg Drive.—Scott F. Evans, Minneapolis, Minn. Filed November 1, 1906. No. 915,947. See cut.

Issued on March 30, 1909.

Conditioning Wet Cereals.—Robert W. Jessup, Oakland, Cal., assignor of one-half to Fairfax H. Wheelan, San Francisco, Cal. Filed October 14, 1907. No. 916,448. See cut.

Centrifugal Grain Cleaner.—Fritz Miller, Esslingen, Germany. Filed February 1, 1908. No. 916,757. See cut.

Grain Cleaner.—George R. Davidson, Lenox, Mich. Filed April 28, 1908. No. 917,016.

Corn Grader.—Adelbert S. Beymer, Kansas City, Mo. Filed February 9, 1907. No. 917,240. See cut.

Grain and Seed Separator.—Heinrich Mobus, Braunschweig, Germany. Filed May 2, 1907. No. 917,339. See cut.

Emory Sells has been appointed manager of the Farmers' Elevator at South Corinth, Iowa.

TRAVELING SALESMAN.

"The Traveling Salesman" began a limited engagement at the Illinois theatre, Chicago, on Monday, April 12, after a run of nine months in New York City. The play is from the pen of James Forbes, author of "The Chorus Lady," and is a worthy successor of that universally successful play.

"The Traveling Salesman" will be presented at the Illinois with the original New York company in its entirety. The prices will be 50c to \$1.50. Performances every night, including Sundays; matinees Wednesday and Saturday. The original New York cast includes Frank J. McIntyre, Elsie Ferguson, William Beach, Sarah McVicker, Arthur Shaw, Percival T. Moore, N. D. Blackmore, Nicholas Burnham, Edward Ellis, Richard Ogden, R. C. Turner, Maud B. Sinclair, Francis Golden Fuller and Morin Fuller.

Olaf Paulsen has been appointed manager of the Powers Elevator Co.'s business at Adrian, N. D.

Mills in Western Kansas, Lundsborg, Hutchinson, Wichita, etc., have been compelled to go to Kansas City for milling wheat; and Chicago has been send-

Specially Constructed Conditioners and Driers for Country Elevators

¶ We have recently placed on the market a line of small machines for drying and cooling, suitable for small elevators and warehouses.

¶ All the well known **Ellis Patents** are embodied in these machines.

¶ Among their many good features is the small space required for their installation in the elevator.

¶ Built in three different styles of wood, composite or steel and of any desired capacity.

¶ Using only cold air, they do not affect the insurance rate.

¶ Absolutely the fastest machines on the market.

¶ The cost is so low as to be within the reach of every small elevator in the country.

¶ A postal card mailed to us will bring you full information.

The ELLIS DRIER CO.

747 Postal Telegraph Bldg.

CHICAGO

ing wheat to Kansas City during the past thirty days.

Reports from Walla Walla, Wash., give promise of an excellent wheat crop in that section this season. Recent weather has been very favorable.

M. F. Birdseye, agent for the Monarch Elevator Co. at Wheaton, Minn., has been promoted to the position of traveling auditor for the company. John G. Hanson of Farmington, N. D., succeeds to Mr. Birdseye's position at Wheaton.

M. E. Fitzgerald has sold out his interest in the implement firm of Rapelje & Fitzgerald at Lenox, Mich., and will represent the Richmond Elevator Co., of Richmond, Mich., as a buyer through Saniac, Macomb and St. Clair counties.

Prof. F. D. Fuller, chief chemist of the Pennsylvania State Department of Agriculture has been appointed chief of the cattle feed and grain investigation laboratory of the Bureau of Chemistry, National Department of Agriculture.

M. C. Rankin, Commissioner of Agriculture of Kentucky, has sent a bushel of pure-bred seed corn to each of ten counties of the state, selected by Superintendent of Public Instruction, with the plan of having it planted by schoolboys, the product to be exhibited at the county farmers' institutes. He offers four prizes for the best corn exhibited. The corn so shown becomes the property of the state Department of Agriculture.

April 15, 1909.

L. C. Crow, president of the Farmers' Educational and Co-operative Union, which is said to have more than 15,000 members, announces from Spokane, Wash., that the Union owns 40 warehouses and that it intends to have 100 more in operation in Washington, Idaho and Oregon at the opening of the grain season next fall. It is also likely that the union will extend its field of operation into Western Montana, thus giving it control of the situation in this part of the Northwest.

Grain and Seeds

CANE SEED FOR SALE.

Orange and Red Top. Ask for prices.
ALVA MILL & ELEVATOR CO., Protection, Kan.

SELECTED SEED CORN FOR SALE.

Standard White and Yellow Dent varieties.
WESTERN SEED AND IRRIGATION CO., Fremont, Neb.

SEEDS FOR SALE.

Millet, Cane and Kaffir Corn in carlots. Prices on application.

J. G. PEPPARD, Kansas City, Mo.

ALFALFA MEAL FOR SALE.

We are booked ahead on alfalfa meal. Let us send you sample and prices delivered. Address

F. G. OLSON GRAIN CO., Wichita, Kan.

NORTHERN SEED OATS.

We can supply choice, heavy seed oats, raised in our cold climate; very hardy and rustproof.

FARGO SEED HOUSE, Fargo, N. D.

COW PEAS FOR SALE.

Choice variety of New Era Cow Peas, in carload or local lots. If interested, ask for prices.

BERTRAND MERCANTILE AND GRAIN CO., Bertrand, Mo.

SEED CORN.

Well cured and matured, testing 98 per cent. Fancy Oats, Clover and Timothy Seed; graded; re-cleaned. Sample free.

DE WALL BROS., No. E., Proctor, Ill.

SEED FOR SALE.

Medium and Mammoth Clover, free from buckhorn; Alsike, free from sorrel; also Timothy. Write for samples and prices.

NATHAN & LEVY, Ft. Wayne, Ind.

THE BEST ALFALFA SEED GROWS "OUT THERE IN KANSAS."

We sell it. Ask for samples and prices. Can furnish Millet, Kaffir Corn and Cane Seed in carlots. Small booklet on Alfalfa mailed free of charge.

THE BARTELDES SEED CO., Lawrence, Kan.

STRAIGHT OR MIXED CARS.

Write us for prices on Bran, Shorts, Kaffir Corn, Cane, Millet, Clover, Alfalfa Seed and Alfalfa Meal and Red Texas Oats. We can ship straight or mixed cars.

SIMMONDS-SHIELDS GRAIN CO., Kansas City, Mo.

FLOUR AND MILL FEEDS.

Mixed cars of flour and mill feeds in 100-pound sacks are our specialties. Would like to send you a trial order to convince you of the superiority of our products.

ANSTED & BURK CO., Springfield, Ohio.

MILLET FOR SALE.

We are situated in the largest millet-producing section in the state of Missouri and have a good supply of millet fresh from the farm. Will sell in carlots or less. Prices on application.

D. H. CLARK, Galt, Mo.

COTTON SEED MEAL.

Owl Brand Pure Cotton Seed Meal, richest cattle food on the market. Well known and popular among feeders and dairymen. On account of high-priced grains, it is in great demand. Write for free booklet "E" on feeding.

F. W. BRODE & CO., Memphis, Tenn.

SEED CORN.

Pure-bred, high-yielding varieties—Reid's Yellow Dent, Early Yellow Dent and Silver King White Dent. Plant this Northern-Illinois-grown seed and you will not have soft corn. Write for my freight-prepaid prices to grain dealers.

L. C. BROWN, La Grange, Ill.

For Sale

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

ELEVATORS AND MILLS

FOR SALE OR EXCHANGE.

Magnificent grain elevator, located at Vineland, Union County, Illinois. Price, \$10,000.

WM. SACKS, Attorney, Carleton Bldg., St. Louis, Mo.

FOR SALE.

Elevators in Illinois and Indiana that handle from 150,000 bushels to 300,000 bushels annually. Good locations. Prices very reasonable. Address

JAMES M. MAGUIRE, Campus, Ill.

FOR SALE.

Line of ten elevators, seven in South Central and Northwestern Minnesota, three in Southern Minnesota, all good points; \$45,000.00. Easy terms if taken at once. Good reason for selling. For particulars, address

J. H. BALL, 422 Board of Trade, Duluth, Minn.

LINE OF GRAIN ELEVATORS AND CLEANING HOUSE.

One of the best lines of grain elevators and cleaning houses in Minnesota, on good line of railroad, at the low price of \$60,000. Owners wish to retire from the grain business. Splendid grain-buying points and also coal business in connection. Address

J. D. MILLER, Endicott Bldg., St. Paul, Minn.

FOR SALE.

Elevator and lucrative business. Elevator capacity, 75,000 bushels; all latest improvements, with electric power, etc.; large grain warehouse; large fireproof brick hemp house; coal and grain business. Situated in the best of the Blue Grass region, Georgetown, Scott County, Ky. Only elevator in county; annual wheat production, 400,000 bushels. Georgetown has a population of 8,000. Three railroads in our yards. For particulars address

S. S. OFFUTT & CO., Georgetown, Ky.

MICHIGAN ELEVATORS.

On account of the diversity of Michigan crops the elevator business is more profitable and permanent than that in any other state. We have a number of money-making Michigan properties on our list, all in active operation, with good established jobbing and retail trade. The difference between failure and success is often due to getting just what will fit. Why take a misfit or keep a misfit when you can get what will just fit your wants? Ask for our list. If you own a Michigan elevator that does not fit, write us.

THE HENRY W. CARR CO., Saginaw, W. S. Mich.

MACHINERY

ENGINES FOR SALE.

Gasoline engines for sale: 5, 7, 10, 20, 30 and 45 horsepower.

TEMPLE PUMP CO., 15th Place, Chicago, Ill.

FOR SALE.

Fifteen-horsepower Otto Gasoline Engine and all fixtures for same, ready to run.

BELT ELEVATOR & FEED CO., Indianapolis, Ind.

FOR SALE.

A lot of round galvanized iron tanks, 8x6 feet diameter; suitable for grain. Also a lot of Ansonia Rolls that we can refit for any make of mill.

YPSILANTI MACHINE WORKS, Ypsilanti, Mich.

ENGINES FOR SALE.

Gas and gasoline engines, slightly used or rebuilt and in good condition, at bargain prices: 20-horsepower Otto; 22-horsepower Miami; 15-horsepower International; 8-horsepower Weber; 8-horsepower Master Workman; 7 and 3½ horsepower air-cooled. New engines and producers, all sizes, for immediate shipment.

STANDARD SCALE CO., 50-52 S. Canal St., Chicago, Ill.

FOR SALE.

We have for sale two new Triumph Corn Shellers, cheap for cash.

One complete outfit of machinery—rolls, belting, elevators, cleaners, etc.—for a 100-barrel flour mill. Must be sold at once, very cheap for cash.

One 50-horsepower gasoline engine, good as new, at less than half price. Address

GRAIN DEALERS' SUPPLY CO., 305 South Third St., Minneapolis, Minn.

SCALES

SCALES FOR SALE.

Scales for elevators, mills, or for hay, grain or stock; new or second-hand at lowest prices. Lists free.

CHICAGO SCALE CO., 299 Jackson Boulevard, Chicago, Ill.

SCALES FOR SALE.

Slightly used or rebuilt scales, guaranteed in good condition, at half prices: 100-ton, 42-foot Standard; 80-ton, 42-foot and 60-ton, 42-foot and 38-foot Fairbanks; 15-ton, 22-foot Standard; 10-ton, 14-foot; 6-ton, 14-foot; 5-ton, 14-foot Fairbanks wagon; 200 and 150-bushel hopper, Fairbanks; 2,500-pound Howe Dormant; 600-pound Fairbanks Flour Dormant; several portable scales; all offered subject to prior sale. Also, new scales, all sizes to 200-ton capacities, for sale or exchange. Repairing and testing a specialty.

STANDARD SCALE CO., 50-52 S. Canal St., Chicago, Ill.

Miscellaneous Notices

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

WANTED.

Manager for a 350-barrel spring wheat mill. An energetic, experienced, reliable man, who would take \$5,000 stock in company. Going business and chance for development. Profitable municipal lighting. Only those who care to invest need apply. We want manager interested in company as present stockholders are non-resident. Address

MINNESOTA, Box 4, care "American Elevator and Grain Trade," Chicago, Ill.

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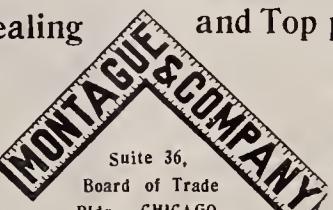
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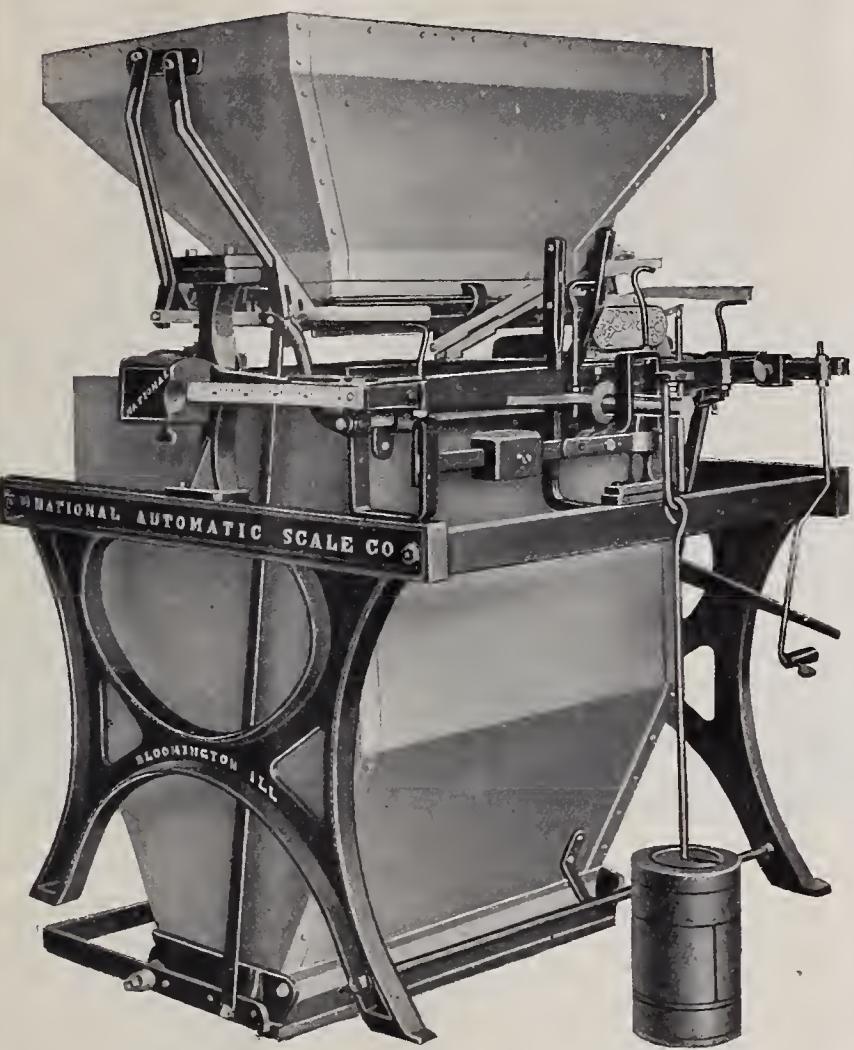
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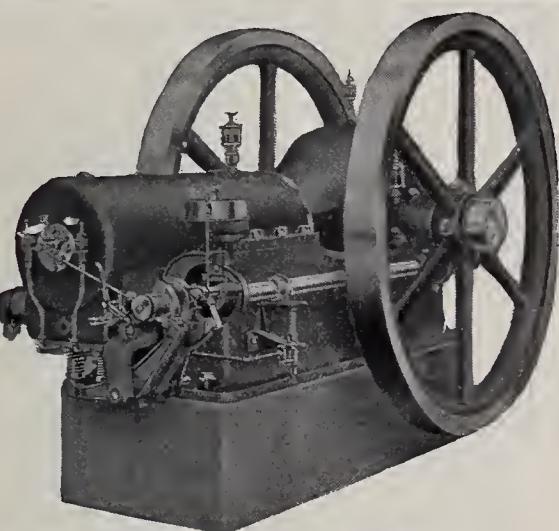
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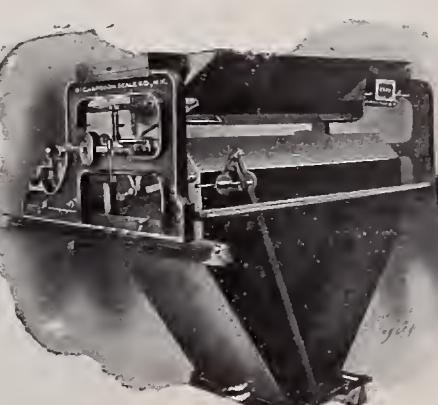
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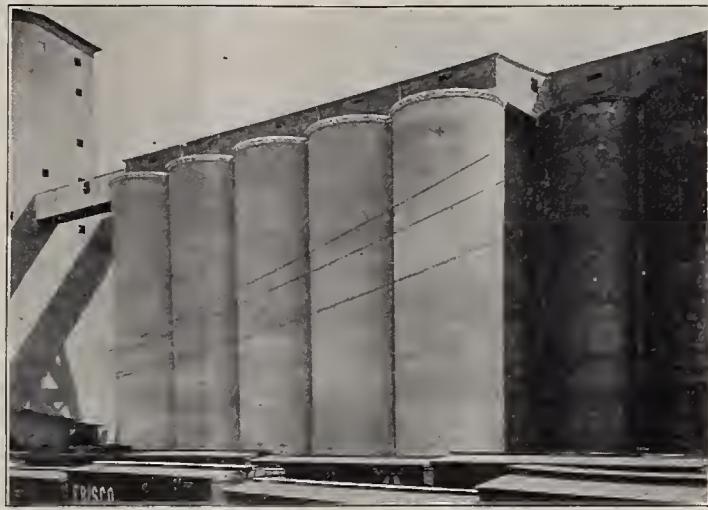
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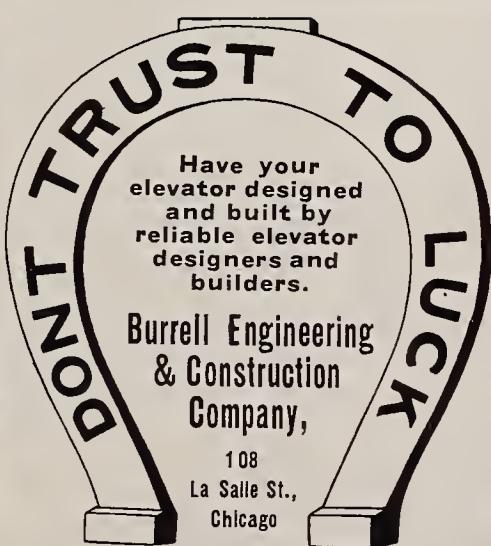
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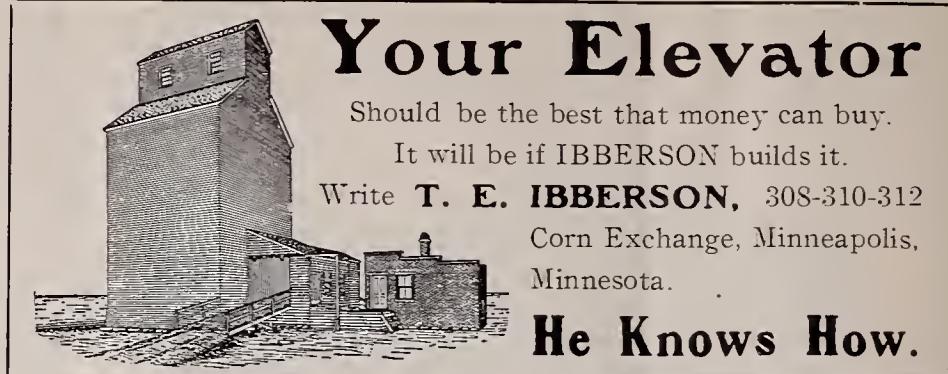
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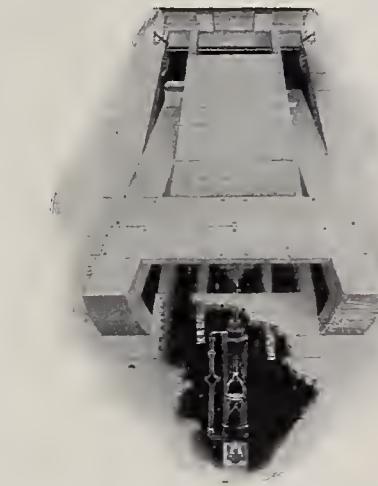
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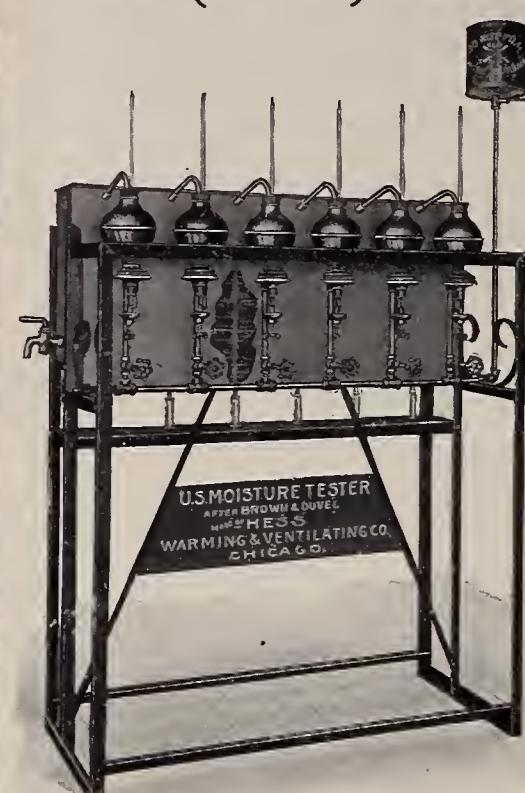
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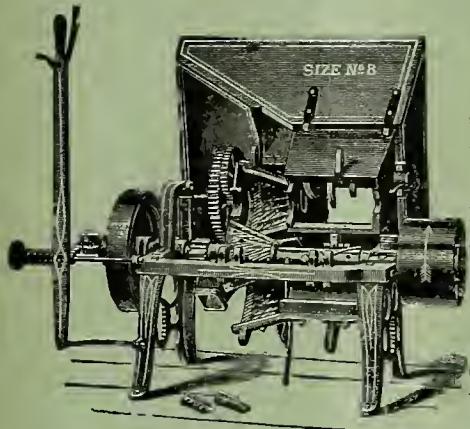
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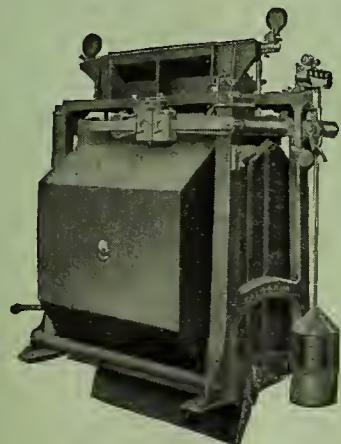
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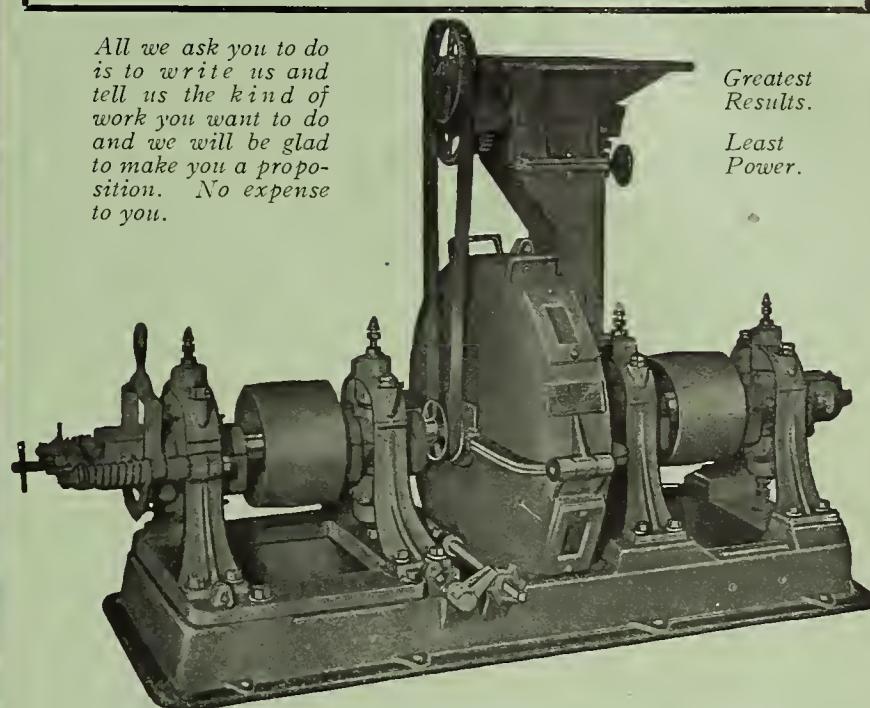
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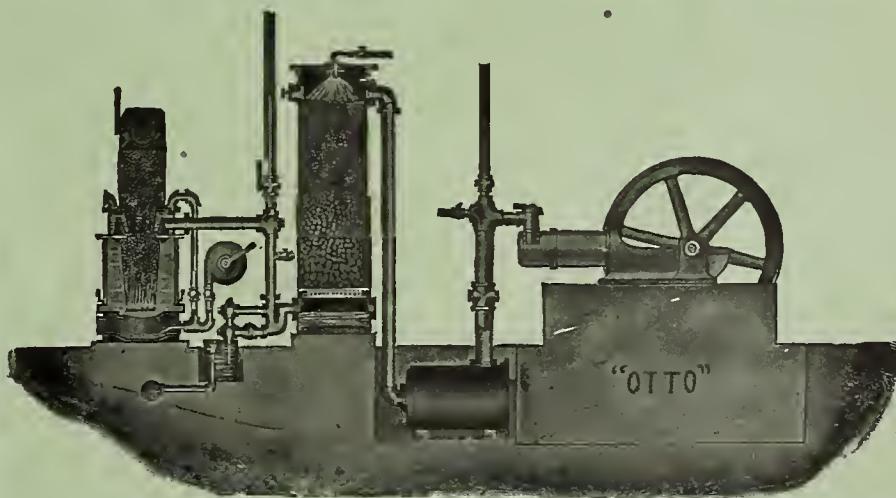
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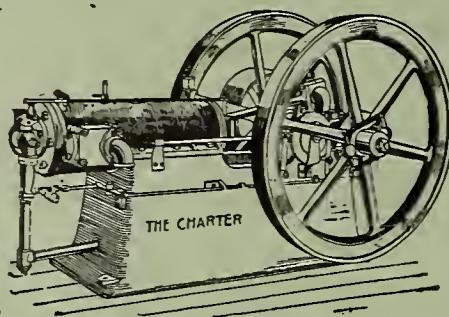
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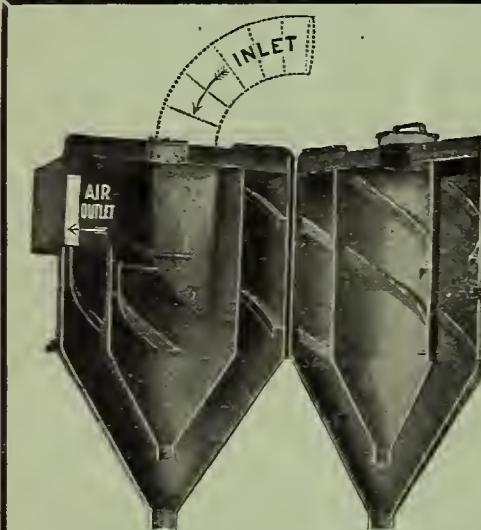
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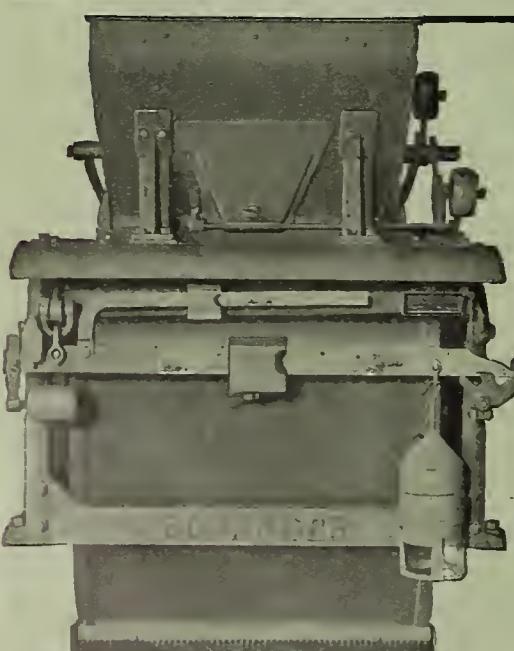
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